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# MEMOIRS

OF THE

## MEDICAL SOCIETY

OF

## LONDON,

INSTITUTED IN THE YEAR 1773-

VOL. VI.

#### LONDON:

PRINTED FOR LONGMAN, HURST, REES, AND ORME, PATERNOSTER-ROW.

1805.



## PREFACE.

IN a scientific age, when medicine is cultivated in the most liberal manner, it might be presumed, that a Society happily instituted for the purposes of promoting medical knowledge, would meet with support and countenance adequate to the attainment of these important objects. In proof of which, we are enabled to remark, that the Members of the Society are nearly doubled in number, since the publication of the last volume of its Memoirs.

It will not be deemed that the communications read at the Meetings of the Society, and the practical discussions that are offered, although highly important, constitute the sole advantages which its members, and ultimately the public derive, when it is considered, that the library in possession of the Society, con-

A 2

tains

tains upwards of ten thousand volumes, many of them of singular rarity and value, which are always accessible to its Members.

The Society, ever anxious to record histories of epidemic, contagious and popular difeases, took an early and active interest in collecting and preserving materials for elucidating the history of the late Influenza; which it was enabled more extensively to do, in consequence of the indulgence granted by the Post-Masters General, and the polite affistance of Mr. Freeling Secretary of the Post-office, to allow the Essays sent to the Society on this subject to pass free of postage, which the Society cannot but gratefully acknowledge; and at the same time, trust, that the great body of useful information thus collected will amply repay to the public any deduction occasioned by this liberal sacrifice.

The Society, continually zealous to enlarge the field of Medical Science in every direction, have persevered in rewarding genius, by conferring Medals on the Authors, whose Communications have been judged the most meritorious.

#### In the Year 1801.

To Dr. Bouttatz, for his Paper on the Medicinal effects of Phosphorus. The Fothergillian Gold Medal.

To Dr. Joseph Adams, for his Paper on Frambroesia Guineaensis, A Silver Medal.

#### 1802.

To Dr. Falconer of Bath, for his Paper on Ischias, A Silver Medal.

#### 1804.

To Dr. Edward Jenner, A Gold Medal, for his invaluable Discovery of vaccine Inoculation, made when he was a Member of no other literary Society.

#### 1805.

To Dr. Bostock, for his Paper on Diabetes, A Silver Medal.

Further to promote the exertions of genius, and more extensively to call forth abilities, which otherwise might remain dormant, the President has liberally proposed to present Medals, according to regulations mentioned in Article LXXXIII. Page 618.

The

The Society likewise propose to confer the FOTHERGILLIAN GOLD MEDAL, upon the Authors of the best Essays, on the following Subjects:

Question for the Year 1806.

What are the disorders that have been mistaken for syphilis, and how are they to be distinguished from it?

For the Year 1807.

The best account of the epidemic fevers, which have prevailed at various times in North America, Spain, and Gibraltar, since the year 1793, and whether they are the same or different diseases?

For the Year 1808.

What are the best methods of preventing and of curing epidemic dysentery?

For the Year 1809.

What are the criteria by which epidemic disorders that are not infectious, may be distinguished from those that are?

For the Year 1810.

What are the qualities in the atmosphere most to be desired under the various circum-stances of pulmonary consumption.

## REGULATIONS respecting the Medals.

- the Secretary, in the Latin, English, or French Language, on or before the first Day of November, in each preceding year, except the Paper in reply to the first question which will be received any time before December 31, 1805.
- 2. With each Differtation shall be delivered a sealed Packet with some Motto or Device on the outside; and within, the Author's Name and Designation; and the same Motto or Device shall be put upon the Dissertation, that the Society may know how to address the successful Candidate.
- 3. No Paper with the Name of the Author affixed can be received; and if the Author of any Paper shall discover himself to the Council, or to any Member thereof, such Paper shall be excluded from all competition for the Medal.
- 4. All Differtations, the successful one excepted, shall be returned, if desired, with the sealed Packets unopened.

The Society continues to offer two Silver Medals annually; one to the Author of the best Essay, read before the Society within the year, by a Fellow, that is, any Member who resides within seven miles of London; the second, to the best Essay by any other person.

We cannot conclude without expressing the satisfaction we feel, in experiencing the high reputation, which the Society has extensively acquired; and gratefully acknowledging the politeness of many scientistic bodies, in presenting to it their own learned works; at the request of the Royal College of Medicine of Berlin, the propositions they have transmitted to the Society, are inserted as the subject is highly interesting to the world at large.

# A LIST OF THE PRESENT OFFICERS OF THE MEDICAL SOCIETY OF LONDON,

To any of whom Communications may be addressed.

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#### ERRATA.

Page 318, l. 14, for spring 1802, read spring 1782.
122, l. 5, for F.M.S. read C.M.S.
318, l. 1, for XXIV. read XXIX.
l. 1, for p. 144, read 441.
314, l. 2 for LX, read LXV.
5:7, l. 2, for LXI, read LXVI.
527, l. 2, for LXII, read LXVI.
533. l. 4, for Almsford, read Alresford.

## MEMOIRS, &c.

#### ARTICLE I.

Sketch of the similarity of Ancient to Modern Opinions and Practice concerning the Mor-Bus Cardiacus.

BY WILL. FALCONER, M.D. F.R.S. &c.

Read October 16, 1786.

#### INTRODUCTION.

It is a curious, and not uninstructive speculation, to survey the revolution of medical opinions. What the Poet says of the husbandman and of the seasons, is almost equally applicable to a series of theories in Medicine,

--- redit--- labor actus in orbem, Atque in se, sua per vestigia, volvitur annus:

VIRG. Georgie.

During the whole of the last century, and a part of the present, the use of opiates\* and

\* Vide Mortoni Methodum curandi Febrem continuam tationalem, vol. i. p. 335.

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B

wine

wine in feverish disorders was very common, and particularly in fuch as were esteemed to be, in the language of those times, of a malignant quality or disposition. This practice was gradually laid aside, and the use of neutral falts, and other cooling medicines introduced. It was, however, foon discovered, that this new mode of practice would not fuit every case that came under the denomination of fever. The late justly celebrated Dr. Fothergill was among the first who pointed out, not its inefficacy only, but its mischievous effects also, in the ulcerated fore-throat, a fever evidently of a malignant nature. and cordials were again reforted to, and with fuccess. At present the ancient practice is still farther revived, and opiates as well as wine, are successfully administered. There is, I think, reason to believe, that all these changes were made from observation of the bad effects of the practice immediately preceding, and I apprehend with reason. How then shall we account for the revival of a practice which experience had shewn to be unsuccessful? It appears to me, that this may be explained upon the following principles. The cause of disorders of the above-mentioned kind,

kind, was, at that time, imagined to confift in the presence of some noxious substance or humour, the feat of which was principally in the animal fluids. This was thought necesfary to be expelled, and the observation, that many flight fevers had a kind of natural termination by perspiration, caused this discharge to be deemed the most eligible method of carrying off what, in their judgment, was the cause of the disease. Opium therefore, wine, and other cordial medicines, were not administered so much with a view to invigorate the fystem, and to support the spirits, as with an expectation of their acting as fudorifics, and by that means evacuating the offending, or, as it was then termed, peccant matter. This intention they endeavoured to fecond by the application of external heat. Large fires in the chambers of the fick, heavy bed-clothes, and many attendants affembled there, together with a studious attention to exclude the smallest ingress of fresh air, were all meant to contribute to this purpose.

Experience however of the ill-fuccess of this practice, opened at last the eyes of the medical faculty, and indeed of mankind in general. It was therefore changed; but instead of, being B 2 subjected.

fubjected to a candid examination, which might have determined what parts of it were exceptionable, and what proper to be retained, it was discarded altogether.

This indiscriminate rejection has, I apprehend, contributed to postpone considerably the knowledge of a most useful remedy. The exhibition of opiates is not, more than that of wine, necessarily connected with the application of external heat. The ancient physicians employed both the above remedies in such cases, and accompanied them with the strongest recommendation of coolness of temperature, and the admission of fresh air, and in all probability their practice was for \* the most part successful.

The revival of these remedies in the present age, may suggest an useful caution to medical practitioners against a general and precipitate alteration in every part of any mode of practice that has been of long standing.

General systems of practice that have been long in use, are seldom wrong in every point; they have probably been, in a good measure,

<sup>\*</sup> See a passage from Aretæus, quoted in the latter part of this Paper, under the account of the mode in which the Morbus Cardiacus terminates.

the result of experience; and if, in some instances, they have been carried to too great a length, or misdirected by erroneous opinions or fanciful analogies, we may curtail their extravagancies, and correct their mistakes, and retain notwithstanding something useful. We have feen the use of wine and opium condemned in diforders wherein the latest experience has shewn them to be efficacious remedies; and we have reason to think, that this prejudice arose in a great measure from their having been formerly used in conjunction with a regimen with which they had only a cafual connection, founded on a mistaken theory. The father of physick has cautioned us against precipitate decisions of every kind, by declaring, that "judgment is difficult, as well as experiment is hazardous."

Comparison between the ancient and modern Descriptions, and Method of Cure, of the Morbus Cardiacus, or Nervous Fever.

Ancient Names of the Disease.

Novos ungolanos. Aretæi et Galeni.

Morbus Cardiacus. Celsi, Plinii et Cælii Aureliani.

Description and Symptoms of the Disease, according to the ancient Writers.

A disposition to the Morbus Cardiacus is indicated by a diminution of the natural strength, and by lowness of spirits \*. Galleni Finitiones Medica.

Loathing of food. Cælii Aurclian. lib. ii. c. xxxii.

Modern Names of the Disease.

Slow nervous fever. Hux-ham.

Febris lenta vel nervosa.

Home.

Typhus nervosus. Sauvage. Typhus mitior. Cullen. Low fever. Wall.

Description and Symptoms of the Disease, according to the Moderns.

Listlessiness and general weariness, like what is selt after great satigue. Hux-ham on Fevers, cap. vii.

Listlessness. Wall, p. 3.
Unusual satigue after motion or exercise. + Home,
part ii. § 2. Princ. Nied.

Nausea and disrelish of every food. Huxham, cap. vii. Loathing of food, nausea. Wall, p. 4.

\* Cardiaca dispositio est innati roboris labesactatio & languor. N. B. The Latin translation of Galen, printed at Venice, apud Juntas, A.D. 1565, is referred to in this work.

† Inusitatâ lassitudine post motum.

Despondency

Despondency of mind. Involuntary tears. Calii Aurel. Ibid.

Heaviness and dejection of spirits Huxham, cap. vii. Dejection of spirits, anxiety, agitation, moaning. Wall, p. 4.

Dejection of spirits, involuntary groans, terror of mind. *Home*, *Ibid*.

Tremulous voice. Cælii
Aurel. Ibid.

Speech very inarticulate and fcarcely intelligible. Hux-ham, Ibid.

Pale countenance. Cælii
Aurel. Ibid.

Countenance dead coloured. Huxham, Ibid.

Hollow eyes. Cælii Aurel. Ibid.

Respiration short, difficult and laborious. Cælii Aurel. Ibid.

Respiration laborious, and interrupted with sighing or sobbing. Huxh. Ibid. Oppression of the parts about the heart, and difficulty of respiration. Home, Ibid.

Great weakness of body. Cels. lib. iii. cap. xix.

Weakness and tremor of the hands, and general muscular debility. Wall, p. 4.

Great prostration of strength.

Home, Ibid.

Tongue sometimes moist, at others destitute of its natural moisture, and dry. Cæl. Aur. lib. ii. cap. 32. In some instance the tongue is sound rough and

The tongue at the beginning is feldom or never dry or discoloured, but sometimes covered with a thin whitish mucus; at length, indeed, it appears very B 4

dry. Cæl. Aur. lib. ii. cap. 33.

Tongue rough, dry, and dark coloured. Aretæus on the Cure of acute Diforders, lib. ii. cap. 3.

Want of sleep. Aretæus
Ibid

Little sleep. Cal. Aur. lib. ii. cap. 32.

Constant watchings. Cal. Aur. lib. ii. cap. 32.

In some a sweat comes on. that is suddenly collected upon the furface of the whole body. In some cases this is at first, only upon the face and neck, when it is small in quantity, thin and watery. From thence it spreads over the whole body, and then is profule, thick, glutinous, viscid, and of an ill imell, resembling the washings of slesh meat. Cæl. Aur. lib ii. cap. 32. Immoderate sweats. Cels.

Immoderate sweats. Galen. Prosuse sweats. Aretæus. Sweats on the face and breast. Ætii, 438.

Ibid.

dry, red, and chapped. Huxham.

Tongue at first white afterwards brown. Wall.

The patient is commonly quite void of sleep. Huxh. No real sleep. Wall.

A state of waking very much resembling sleep.

Home.

pour forth all at once, about the 9th, 10th, or 12th day, commonly coldish and clammy on the extremities. Huxham. Profuse sweats. Home.

Urine pale and watery, with white clouds. \*Galen de Dynamidiis.

No great increase of heat, but rather a diminution of it in different parts of the body. + Gal. Aur.

A coldness and insensibility of the knees, elbows, and legs. ‡ Cal. Aur. LÆtii, 438.

A heat of the Intestines, as it were from fire, whilst the extremities are cold: the hands and extreme parts of the feet are very cold. § Aretaus.

Pulse very small, frequent and tremulous. \*\* Aretaus.

The urine is commonly pale, and often limpid; frequently of a whey colour, or like vapid small beer, in which there is either no manner of sediment, or a kind of loose matter, like bran, irregularly scattered up and down in it. Huxham.

The urine was almost lim-

The urine was almost limpid. Wall.

The heats and chills are uncertain and unequal.

Huxham.

No great heat. Home.

A high colour and heat in the face, whilst the extremities are quite cold. Huxham.

The pulse quick, weak, and unequal; sometimes for

<sup>\*</sup> Urina alba et aquosa cum nebulis albis.

<sup>†</sup> Neque servor plurimus, sed magis in aliis parvus corporis partibus.

I Genuum gelidus stupor, et cubitorum, et tibiarum.

<sup>||</sup> Extremarum partium frigiditas.

Θεεμασιη των σπλαγχνων οκως απο συξος, ψυχεα δε τα εξω•
 Χειζες δε καὶ σιοδες ακζοι ψυχεοβαβοι.

<sup>\*\*</sup> Σφυγμοι σμικοοι, πυκνοίαλοι, τρομωδεες,

sus.

Pulse very small and weak. \* Ceisus.

Pulse quick, frequent and low. + Cal. Aurel. + Æt. p. 435.

Pulse frequent, quick, small, weak, and, as it were flowing. In the progress of the dilease it becomes funk, obscure, tremulous, creeping, and at the same time irregular and failing. | Calius Aurel.

Faintings on the access of the complaint. & Cal. Aurel.

See also Aretaus on the cure of this disease.

a few minutes flow, nay, intermitting; fometimes fluttering. Huxham.

Pulse exceedingly quick; seldom less than a hundred and thirty, and generally very feeble. Walle Pulse quicker and weaker, than natural. Sauvage Nof. Method. Typhus nervo-

The load on the præcordia, anxiety and faintness, grow more urgent, and they often fall into an actual delirium, especially if they attempt to fit up. Huxham.

Causes of the Disease as- Causes of the Disease assigned by the Ancient Authors.

It takes place after immoderate abstinence, or illsigned by the Moderns.

It most commonly attacks persons of weak nerves,

- \* Venarum exigui, imbecillique pulsus sunt.
- + Pulsus celer, densus, humilis.
- † Pulsus obscurus.

|| Pulsus densus, celer, parvus, imbecillus, inanis, et quasi fluens: increscente passione etiam demersus, obscurus, tremulus, et sormicabilis, et inordinatus ac deserens.

§ Animi defectus imminentibus accessionibus.

timed

timed bleeding, or when any other imprudent evacuation has been used.—
Galen. Medicus, p. 56.—
Edit. Juntas, Venet.

The causes that produce this complaint are many and various, but especially long continued indigestion or intemperance in wine, or using the bath after meals, or taking emetics after supper, or the passions of grief or fear, which producing essects similar to the natural tendency of the constitution, dissolve the body in violent sweats.

\*\* Cal. Aur.

Ancient Method of Cure.
Indication I.

To restrain the Sweats.

It is proper to use several efficacious remedies, both

a lax habit of body, and a poor thin blood; those who have suffered great evacuations, a long dejection of spirits, immoderate watchings, studies, fatigue, and the like; and also those who have used much crude, unwholefome food, vapid impure drinks, or who have been confined long in damp foul air; that have broken the vigour of their constitutions by falivations, too frequent purgings, immoderate venery, &c. Huxham.

Despondency of mind is reckoned among the causes of putrid diseases by Dr. Lettsom, p. 5.

Modern Method of Cure.
Indication I.

To restrain the Sweats.

Profuse sweats should never be encouraged. Huxham.

\* Sed præcedentes causæ quibus hæc passio sufficitur multæ atque variæ sunt: magis autem jugis indigestio, vel vinolentia aut post cibum lavacra, aut post cænam vomitus aut mæstitudo vel timor in quæ consentiens corpus solvitur in sudores.

to restrain the sweats, and restore the strength.

\* Aretaus.

The first attempt to be made towards the cure is, to apply astringent cataplasms to the præcordia, and the second, to restrain the sweats. †Celsus.

#### 1. By internal Remedies.

#### a. By Wine.

If however a profuse sweat should break out, and the pulse should fail, the voice become acute, and the breast grow cold, it is proper to give as much wine as the patient can drink, for in such circumstances, wine affords the only hope. ‡ Aretaus.

#### b. By Opium.

A circumstance is often obferved in the Morbus Cardiacus, in which there is Profuse sweats are seldom or never advantageous.—

Huxham.

#### 1. By internal Remedies.

#### a. By Wine.

In such prosuse colliquative sweats, I have very frequently given a little generous red wine, diluted somewhat, if necessary, with the greatest advantage, it presently moderating the sweat, &c.—
Huxham.

#### 2. F.y Opium.

Wall on the Synochus, Case I. and Case VIII.

- \* Χρη δη και τη αλλη ιηζέιη ενεργω χρέεσθαι, εςτε την των ιδρωίνη καθεζιν, και της δυναμιος ανασασιν ες το ζωπυρον.
- + Curatio prima est supra præcordia imponere quæ reprimunt, cataplasm sta: secunda sudorem cohibere.
- Ι Πη δε πολυς μεν ιδεως εκερη, σφυγμοι δε πεος ακινησιην, οξεια δε φωνη αθεςμα δε καὶ το τηθεα, διδοιαι δε καὶ του οινου οκοσον αν δυνήσι στιν, μουνος γας οινος ελπις ες ζωην Ιυχεοις.

the greatest necessity for employing theriaca. For when the body is melted down by profuse and continued fweats. the strength fails so much that even wine will not afford a sufficient support to enable the patient to refist the disorder, when this is given it proves a remedy, and as it were rouses the decaying strength, and restores health to the fick. Galen. de Theriacâ ad Pisonem, p. 96.

Huxham on Fevers, p. 89:

Edition the third.

Lettsom's Med. Memoirs,

Case XXXV.

Home Princip. Medicin.

c. By Peruvian Bark.

d. By cold Liquors.

d. By cold Liquors.

Let what he takes at the Lettsom's Med. Memoirs, beginning of the disorder passim.

It is proper to give drink cold, in point of temper-

\* Aretaus.

be warm, but afterwards

all cold, if no internal in-

flammation be prefent. -

\*Τα ωςωία θεςμωθεες—επι δε τοισι τα πανία ψυχςα, ην μη \*ποικεςενσι Φλεγμοναι, ature, in small quantities, and at small intervals, that the body may not be weakened by being as it were deluged with liquids, but rather strengthened by the contact of a cold body. \*Cal. Aurel.

2. By external Applications.
a Of cool Air.

The patient should be covered lightly with clothes, and placed in a cool place with the windows open, so that a thorough draught of air may come upon him. + Celsus.

Let him lie in a cool air, in a chamber of a northerly aspect, that the cool northerly breezes may blow upon him and recal to life, his almost departing foul. ‡ Aretaus. Ætii, 438.

If the place be not naturally cool, we must make 2. By external Applications.
a Of cool Air.

Lettsom's Med. Memoirs, passim, where the advantages of cool and pure air are strongly inculcated.

Cullen's First Lines of the Practice of Physic. Sect. CCII.

† Levi veste debet esse contectus, positusque in loco non calido, senestris patentibus, sic ut perstatus aliquis accedat.

Ι Κατα κεεσθω δε εν ητει ψυχεω, είδε καλ περι; αρκίον ο οικο; είδε καλ ειη αυρη βορεου, ψυχρη επιπνειώσα ζως εησει.

--- ханы; хэхадлова дирег. Пет. II. v. 696.

<sup>\*</sup> Potum dabimus frigidum, parvum, atque pauletim, no liquoris multitudine corpus irrigatum laxetur, sed magis tactu frigidæ qualitatis densetur.

it so artificially by taking away the window frames, unless the sun's entrance or the inclemency of the air forbids. \* Cæl Aurel.

#### b. Of cold Water.

Sweats are sometimes checked by the application of a spunge soaked in cold water, to the face. † Aretaus.

It is proper to use soft sponges squeezed out of cold water, which being applied to the face and neck of the sick person, and repeated at intervals, cause him to recover his strength. We also do the same by the whole of the breast and face, pres-

#### b. Of cold Water.

See Cullen's First Lines of the Practice of Physic. Sect. CCIII, CCIV. Lettsom's Medical Memoirs, p. 18. note.

\* Denique si non fuerit naturaliter frigidus locus hoc affectabimus, specularia detrahentes, nisi sol obstiterit aut acris inequalitas. See more on this subject in Cœlius Aurelianus, in the same chapter, section 192, 193, &c.

† Εςησε δε κολε ιδεωλας και σπογγιη ψυχεου ες τα πεοσωπα ωεοσβληθεισα.

(Dr. Cullen speaks of it as a discovery of modern times, that the body might in putrid severs be washed all over with cold water; but Cælius Aurelianus, though he does not approve of it, mentions it as a practice of his time; so that at any rate it is no modern discovery.) "Alii vero in aquam frigidam ægros deposuerunt."—Cæl. Aur. lib. ii. c. xxxviii.

fing on them the water from the sponges, which is mixed with a portion of vinegar, and often changed, that it may not grow warm from continuing in contact with the part, and so lose its tonic powers. \* Cal. Aurel.

c. Of Medicinal Su! stances.
aa. Of Astringents.

Leaves of myrtle and wormwood, of the juice of the acacia, of that of unripe grapes, of alum, and juice of roses, applied to the breast. Aretaus.

Dried roses, powdered alum, pomegranates, and acacia powdered and sprinkled on the body. Cal. Aurel. Powder of myrtle leaves, or of those of the blackberry, of the lees of wine, in-

<sup>\*</sup> Utendom etiam spongiis teneris ex aqua frigida expressis, quibus ora atque colla ægretantis circumtegentes virium refumptionem saciamus, temporum intervallis innovantes. Tunc totum etiam pectus atque oris partes, eodem modo percuramus, frigidam infundentes spongiis, admiscentes etiam aceti quiddam, ac jugiter mutantes, ne perseveratione tactus ex vapore tepescant, et amisso frigore non valcant sacere densitatem.

spissated and dried rubbed upon the body. Celsus.

bb. Of Substances absorbent of Moisture.

Samian earth, flacked lime, calcined gypsum, and flour, sprinkled on the parts liable to perspiration. Aretaus.

Chalk, Samian earth, clay, gypsum, powdered and sprinkled on the body. Cal. Aur.

Gypsum, clay, and chalk rubbed upon the body.

Celsus.

#### Indication II.

To excite the Powers of Life, and to restore the Strength.

See the first quotation from Aretæus, under the former Indication.

- 1. By internal Remedies.
- a. Strengthening Diet, both of Liquids and Solids.

We must support the patient with such Diet as is most sitted to warm and nourish the body, as wine cooled with snow, and such food as is rather of Vol. VI.

#### Indication II.

To excite the Powers of Life, and to restore the Strength.

See Home's Principia Medicin. p. 80.

1. By internal Remedies.

a. Strengthening Diet, both of Liquids and Solids. Huxham, p. 83.

The strength is to be supported by wine, chickenbroths, and a nourishing diet. Home. Sauvage.— Typhus nervosus.

Lettsom's Med. Memoirs a strong

a strong kind, and such as may strengthen the stomach. Medicus Galeni, p. 56.

The third thing to be done for the cure of the Morbus Cardiacus, is to support the strength of the fick, by wine, and nourishing food. This, however, is to be given in fmall quantities, but 'requently, and by night as well as by day, that it may nourish the body, and not overload the stomach. We should not, except it be absolutely necessary, be too forward to employ wine as a remedy. If, indeed, there is reason to apprehend that the strength may fail, then we should give it with food mixed with Avur, especially if the fick person takes but little food. The wine should be of the rough kind, but nevertheless thin, though but little diluted, and cool, and taken freely. The wine should be in its quality neither very weak nor very strong, and it should be taken by

on the Use of Wine, particularly claret, which he advises from one pint to three quarts daily, p.

the patient to the quantity of two or three heminæ in the space of a day and a night; if the patient be a bulky person, more may be taken, especially if he takes but little solid food. \* Celsus.

Let the food that he takes through the day be light, easy of digestion, and composed for the most part of bread-corn. Let it be made agreeable to the palate, even though it should be less proper in point of quality, since, in this complaint, it is par-

- \* Tertium auxilium est, imbecillitati jacentis cibo vinoque succurrere. Cibus non multus quidem, sed sæpe tamen, nocte ac die dandus est; ut nutriat, neque oneret. Is esse debet est infirmissima materia, et stomacho aptus. Nisi autem necesse est, ad vinum sestinare non oportet. Si verendum est ne desiciat, tum et intrita ex hoc, et hoc ipsum austerum quidem, sed tamen tenue, meraculum, egelidum, subinde et liberaliter dandum est; adjecta polenta, si modo is æger parum cibi assumit. Idque vinum esse debet, neque nullarum virium, neque ingentium: recteque tota die ac nocte, duas vel tres heaminas æger bibet; si vastius corpus est, plus etiam: si cibum non accipit.
- N. B. A Hemina is about half an English pint, according to Dr. Arbuthnot, but according to others, twelve ounces, or three quarters of a pint. See Greaves' Works, published by Dr. Birch, vol. i. p. 301. It was equal to the Cotyla. See Rhemius Fannius, Lib. 67. Six Cyathi were equal to a Cotyla. See Rhemn. Fann L. 73.

fult the appetite, as the diforder itself is so nearly connected with weakness of the stomach. Hunger, or want of nourishment, are by all means to be avoided, as this disease is suited to the taking nourishment of all kinds. \* Aretaus.

Let the food be of different forts, mostly of wheatflour, and fuch as may be supped up, rather than fuch as requires chewing; or, if folid food be given, let it at least be of the foft or flippery kind, as yolks of eggs half roafted, two or three flices of bread dipped in wine, which should be given at first warm, but in the progress of the disease every thing should be given cold, unless there be some internal inflam-

\* Τροφή, ανα πάσαν ημέραν, κυθη, ευπεπίος, τα πολλα σιζωδης, ηδε και ηδεία, κην σμικρον χείρον επ. τοισίδε γαρ, των αλλων μαλλον, χαρισεοι ουχ ηκισα γαρ τω σομαχω ες εκλυσιν η νυσος αμφυει. Ασίλια δε, η λιμος υδαμά. ικανη γαρ η νύσος τα πάνλα λαφυξαι.

A similar contion relative to the giving such food as is more agreeable, though less proper, is given in the second section, and thirty-eighth aphorism of Hippocrates.

mation.

mation. Let the wine be of a pleasant flavour, not very aftringent, and by no means rich or heavy. Of the Greek wines, he may use the Chian, or the Lesbian, and such other of the wines from the Islands of the Archipelago, as are of a thin confift-Of the Italian ence. wines, he may use the Surrentine, the Fundanian, or the Signine; if this last should not be too astringent. Such wine, however, is to be avoided, as is either too new, or too old. Let it, however, be administered at first warm, and not less than four cyathi, nor more than a cotyla, before the crisis, even though he should be defirous of it. Afterwards, when he has taken food, and the inflammatory difposition has abated, you may give him as much cold wine as is sufficient to quench his thirst, but not alone, but joined with food; taking care, how-

ever, that it may not be enough to disorder his understanding. \* Aretaus. Cœlius Aurelianus directs various kinds of food to be given, and the thin wines, if any fever remains, as the Sabine, the Surrentine, and the Tyburitine; but if great weakness without fever prevails, to try the Setine and the Falernian, which were stronger bodied wines. Cæl. Aur. lib. ii. cxxxvii.

It is certain, that in the Morbus Cardiacus all our hopes are centered in wine. Some think that this should not be given but at the access of the

\* Εςω ων σίλια μεν ποικιλα, τα πολλα σίλαδεα ως ευμζανειν μαλλον η μασσάσθαι. κην ςερεα εη, ολισθηρα εσεσθαι γιγνεσθω ωα μη καρλα ξυνεςωλα, μηδ' οπλα ολα του ςερεου γυμνα. Ψωμοι διαβροχοι οινω, τα πρωλα θερμωδεες, δυω, η τρεις. Επι δε τοισι τα πανλα Ψυχρα, ην μη υποικερεωσι Φλεγμοναι. Οινος ευωδης, μη καρλα ςυφων, πλαλυς δε ως ηκιςα. Ελληνικοι μεν, Χιος ή Λεσβιος, οκοίσι τε αλλοι νησιωλαι λεπλοι. Ιταλων Σερενλινος, η Φουνδανος' η Φαλερινος, η Σιγνινος ει μη σφοδρα συφη. παραλειεσθαι δε τωνδε τον καρλα παλαιον, η νεωλερον.

Διδοναι ων τα ωρώλα θερμον, μη μειον χυαθων τεσσαρων, ωρο της Χρισιος, μηθε κολυλης ωλειον, κην ευπολος επ. Επι δε τωνδε, σιλιον διδονλα, ει τα της Φλεγμασιης ωαρηκοι, αυθις ψυχρον ορεγειν, οκως ες ακος διψεως ωρος αναγκην δε, μη μονον μεν, ξυνσίλιω δει Προνοεισθαί δε χρη, ως μη αψιν Φρειών ο οινος ωσιενίλαι.

disorder, others not until its force abates. The former of these opinions refers to the restraining the sweats, the latter is founded on the idea of its being safer when the disease abates in its violence, which I find is the general opinion. Plin. Nat. Hist. lib. xxiii. c. 1.

# b. By Medicines internally taken.

See the quotation from Galen, § b, of the first indication.

# b. By Medicines internally taken.

Theriaca Andromachi in fmall quantities, compound powder of contrayerva.—Saffron, Raleigh's confect. with a faline draught every 5th, 6th, or 8th hour.

Sp. vol. aromat. or fœtid: given now and then in cyder whey, or mustard whey.

Tincture of Peruv. bark in fmall quantities, with faffron and fnake-root.

Preparations of the Peruv.

Emetics at the beginning of the disorder. Hunham.

Peruvian bark in strong infusion, as, of three ounces

C 4 of

of the bark in powder to a quart of water, which is boiled down to ten ounces; which quantity is directed to be taken in twenty-four hours. Lett-fom's Med. Memoirs, p. 15

Opium largely administered Wall, passim.

2. By using Evacuations sparingly.

a. Bleeding.

The taking away much blood at a time weakens the powers of nature, and much less is to be taken on this, than other occafions; for, if you exceed ever so little during the time, the patient is subject to fainting, it easily puts an end to life. \* Aretaus.

Reason bears witness, that bleeding the patient, differs in no respect from cutting his throat. † Cæl. Aurel.

2. By using Evacutions sparingly.

a. Bleeding.

I think it is very evident, that no great evacuations are proper (especially bleeding), particularly in persons of originally weak and lax constitutions who are by far the most subject to it. Huxham.

Bleeding is always injurious, unless in an inflammatory state of the blood. Home.

Above all things be sure to refrain the use of the lancet, as you value the life of the patient, and

ωμαβίων, ενεδιως εις αδου τρεπει. ην γαρ επι Συγκοπη και σμικέου αμαβίων, ρηιδιως εις αδου τρεπει.

<sup>+</sup> Phlebotomiam nihil jugulatione differre, ratio testatur.

### b. Purging.

Clysters are only necessary to discharge the long retained hardened excrements, as we must be cautious not to diminish the strength of the body.

\* Aretaus.

It is a most destructive practice in the Morbus Cardiacus, to excite a discharge by the bowels, as long as the nausea, and dislike of food continues. † Cal. Aur.

#### c. Sweating.

See what has been faid above under the first indication.

3. By external applications of the stimulating kind.

The whole body is to be gently rubbed with bruifed bulbi, which, when

your own reputation.

Modern Theory of the

Practice of Physic, by

Brown Langrishe, p. 343.

See Wall, p. 11.

#### b. Purging.

I have known a common purge, injudiciously given, at the beginning of this fever, immediately followed by surprising languors, syncope, and a large train of other ill symptoms.

Clysters of milk, sugar, and salt, may be injected with safety and advantage, every second or third day, if nature wants to be prompted to stool.

Huxham.

See Wall, p. 60.

#### c. Sweating.

See what has been faid above under the first indication.

3. By external applications of the stimulating kind.

Blisters should be applied to the neck, occiput, or behind the ears. Huxham.

<sup>\*</sup> Κλυσμοισι δε, επι σχυβαλοισι παλαιοσι μουνον χζεος. της δυναμεος δε Φείδεο.

<sup>+</sup> Est enim perniciosissimum in cardiacis fastidio attestante ventris sluorem commovere.

they have grown dry upon the skin, cause the stomach to retain the wine swallowed, and by that means produce a return of warmth to the body, and strength and power to the blood-vessels. \*Celsus.

Fresh bulbi, those particularly which are small and red, with pepper and the soft dregs of vinegar, makes the best cataplasm for the seet; this is, however, to be removed constantly at the expiration of an hour, lest it should ulcerate the parts. † Aretaus.

Cataplasms of a similar kind are mentioned by Colius Aurelianus, as having been applied in this disease ‡. Epispastics are advised by Dr. Home. Princ. Medic. But, I believe, they are less used in modern practice than formerly.

4. By

<sup>\*</sup> Totum corpus bulbis contritis super illinendum est: qui, ubi inaruerunt, efficiunt, ut vinum in stomacho contineatur, exque eo toto corpori calor, venisque vis redeat.

<sup>†</sup> Ατας καί βελβοι ωμοι, οι σμικροι τε καί εςυθερι, ξύν πεπέςει καί εξους τευγιη λειη αρισον Επιπλασμα των ποδων καθ ωρην ξυνεχεταία αξιεροία, κινθυνος γαρ ελκεων ηδι ζλυκίαινωσιος.

t Cataplasmata præterea ex lasere et bulbis, item et calce cum pipere. Cal. Aur. L. ii. c. xxxviii.

- 4. By encouraging hopes of recovery, and by entertaining the mind of the patient.
- It is necessary that the sick person himself keep up his spirits and courage, and that the physician should entertain him with such words and discourse as may encourage him to hopes of recovery. \*Aretaus.
- Let the fick person be so placed as to overlook meadows, fountains, and foftly flowing streams, whose grateful exhalations and beautiful appearance cherish the foul, revive the powers of nature, and produce an appetite for both liquid and folid food. If, however, the circumstances of the patient will not afford these conveniences, it will be proper to imitate the cool breezes, by elegant fans, made

4. By encouraging hopes of recovery, and by entertaining the mind of the patient.

The bulbi mentioned above, were probably some root of a plant of the garlick kind, which is even now applied by some practitioners to the feet as a milder stimulant than mustard.

<sup>\*</sup> Χρη ων αυθον τε αλκηενθα και ευθυμον εμμεναι, και τον ιπθρον επεσι μεν παραφασθαι ες ευελπισην εμμεναι.

of branches of odorous trees; and in the spring time, the ground should be strewed with such slowers and leaves as that season produces. \* Aretaus.

Let the fight of the patient be gratified with the view of plants, paintings, and waters, fo disposed that every object he casts his eye upon should be of the pleasureable kind. the discourse of the attendants be cheerful, but let him be filent, though in good spirits. Let him have fuch things to smell to as are of a pleafant odour, and which do not overpower or stupify the senses. The fmell of some nourishing things is proper, as of meal moistened with water or vinegar, or of hot

<sup>\*</sup> Εςω δε καί εις λειμωνας καί ωπηας καί κελαφυζονίας οχέλους · καί ημης το ευπνοον τωνδε, καί η θυμηδιη καί την ψυχην θαλπει καί πην φυσιν ζωγρει. αίαρ καί σεροκλησις του φαγειν τε καί ωιειν. Ην δε υπ' αποριης ημη ταδε τις ευίυχη, μιμεεσθαι χρη καί αυρην ψυχρην ωίορθων ευωδεων ηδονης ριπισι καί ωρην εαρος ψυλλοισι ηδ' ανθεσι τοισι σαρεουσι σορεσανία την γην.

bread fresh baked. \*Are-

Mode of the disorder's terminating, if favourably.

If the disorder takes a favourable turn, the pulse rises, the body recovers its natural warmth, the dissiculty of breathing is lessened, the mind becomes consident of recovery, and an access of strength is perceived on the taking of food. The sleep also becomes more found, and resembles that which comes after satigue. †Cæl. Aurelian.

But if the physician shall act in a rational manner, and all things go on prosperously, if the faintness has ceased, and any instandard may

Mode of the disorder's terminating, if favourably.

We have very seldom any thing completely critical in this sever; in many cases, only time itself seems to wear it off. Hux-ham.

This disorder terminates gradually in recovery, by the assistance of a discharge of saliva, gentle perspiration, discharge by stool, and turbid urine, but for the most part without any evident criss. Home.

The natural progress of the disorder, whether it ended in recovery or in death, was slow and lin-

\* Οίος τεςπωλη, ζύων, γεαζης, υδαίων, ως οςησθαι τα πανία ηδεως. λαλιη των παςεονίων ζιλομειδης ησυχιη, θυμηδιη του νοσεονίος. Οσμαι ευωδεες, αβαςεες ες κεφαλης αισθησιν. αίας και των τςεφονίων οσμαι αλφίων, ξυν υδαίι δευθενίων, η οξει αςίων θεςμων, νεοπεπίων.

† At si in salutaria signa venire cœperint ægrotantes, pulsus resurgit, corporis srigus srangitur, et dissicultas respirationis minuitur, accedente animi quadam securitate, et post sumptionem cibi, virium prosectu: somnus quoque altior, tanquam post laborem dormientium. Cæl. Aurel.

have taken place are difcussed; if the sweats are ceased, if a warmth of temperature be reproduced over the body, even in the extreme parts of the body, feet, and in the nose, if the face recovers it colours, the pulse rises in strength, and is no longer tremulous, but steady, if the voice comes back to its usual tone, and the patient is altogether lively and alert, and no longer feels tired and weak, and gets some natural sleep, and during that time digests his food; if he recovers his fenses during fleep, and nature feems to be refreshed by it, and when he awakes, breathes eafily, and is more strong and active, and seems to recollect what happened during his disease as it were a dream, these are figns of recovery. \*Aretieus.

gering. Either the comatole symptoms gained ground, and without any very manifest alteration that could be marked with precision, the patient sunk into dissolution: or, on the other hand, without any distinguished crisis, he became gradually more calm, collected, sensible, more free from feverish heat; and by an imperceptible progression acquired more appetite and strength, till health was perfectly restored. Wall.

The

<sup>\*</sup> Κήν πανία μεν τα καία λόγον ιπίξος έξδη, ευ δε πανία χωξεη, ξυν τη Ξυγκοπη, και ει φλεγμασιαι επιεασι, εκλυονίαι, και ιδέως μεν ουδαμα:

The above comparative descriptions prove, that the nervous fever was a disease well known to the physicians of antiquity, and the two methods of cure here exhibited, are fo fimilar, both in the general intentions, and in the means of fulfilling them, that on a transitory view we might be led to think that the one in use at present was borrowed from that practifed by Aretæus and Cœlius Aurelianus. But it appears to me, that this resemblance in the practice of the two ages was, in a great measure at least, casual. Huxham, though not the first revivor of the cordial regimen, made considerable improvements upon the practice of his time in the cure of the disease; but he was often indecifive and timid in his operations, although his general intentions were proper and judicious. He was sensible of the necessity that

<sup>•</sup>νας, τον νεσον.

•νας, τον νεσον.

there was of supporting nature; yet he employed means in no degree adequate. A little wine mixed with fago, gruel, or panado, or a little generous red wine somewhat diluted with water, is all he allows; and the cordial qualities of opium seem to have been altogether unknown to him, or at least overlooked. He indeed directs a little Theriaca Andromachi, or Elix. Paregoricum, with somewhat of the same intent with which they are at present given, viz. " to calm the hurry and tumult of the blood and spirits, and to produce soft refreshing slumbers;" but he disapproves of giving any quantity of an opiate that could be really efficacious if the fymptoms were urgent. It is extraordinary, that this eminent physician, who was professedly so great an admirer of the ancient writers on medicine, and who well knew that this difcase was the same which was called by them the Morbus Cardiacus, and who seems to approve of the method of cure recommended by Celfus, which confifts in giving wine in large quantities, should not have imitated their praclice in a more effectual manner. But it appears plainly, that he was biaffed

biassed by former prejudices, which he was afraid to shake off. He knew that profuse sweating was prejudicial, yet seems to wish to encourage perspiration farther than is now found to be of service. His candour and acuteness in observation pointed out the general indications, although his former prejudices would not suffer him to carry his intentions properly into execution.

M. de Sauvages appears to have improved upon Huxham's plan, though he evidently copies his practice in a great measure. He recommends the use of wine and cordials, and difcourages the fweating regimen altogether; but disapproves of opiates, probably from the idea, however erroneous, of their counteracting his general indications of supporting the strength and spirits. The free use of the last mentioned remedy is, perhaps, the greatest improvement in modern times in the treatment of this disorder. It is now found to act as a powerful cordial in fuch cases, and to second the effects of wine in an admirable manner, contributing both to raise the spirits, and to excité the vital powers, and to restrain VOL. VI. the the immoderate evacuations both by stool and perspiration.

So far modern practice, as appears by the above comparison, seems to agree nearly with the ancient. It must be owned, that the enlargement of our Materia Medica has afforded us several advantages. The Peruvian bark is, without doubt, a medicine suited to the intention, but does not feem to possess any particular or specific powers, like those which it manifests in the intermittent fever; and fince the scruples concerning the free use of wine and opium have been got over, appears to be less necessary than it was thought fome years ago, when it was depended upon nearly altogether. - Our wines also may, perhaps, be superior to those used formerly, and cantharides afford us an opportunity of employing a stimulus, more certain and effectual than the methods recommended by Celfus, Aretæus, and Cælius Aurelianus; though, perhaps, their applications might fufficiently answer the intention of rubefacients, which was all that was defired \*.

<sup>\*</sup> See the quotation from Aretæus, under the third head of the second indication of cure.

The various forms likewise in which opium may be taken are, undoubtedly, at least, convenient, and allow us greater latitude in suiting them to the palate, inclination, or prejudice of different persons.—Still, however, I must think that the method of cure laid down by the old writers, is more sull and explicit; and, upon the whole, preferable to any that I have seen even in the latest publications.

Many material circumstances are suggested by Cælius Aurelianus and Aretæus, concerning which modern writers are either silent, or do not sufficiently inculcate their necessity, nor describe the most convenient method of using them.

Scarcely any attention is of greater importance in such situations, than to preserve the coolness and purity of the air; but scarcely any modern writers, that I have seen, Sydenham and Dr. Lettsom excepted, are sufficiently aware of the importance of these considerations; which is the more extraordinary, as so many interesting discoveries have been made, of late years, on the nature and uses of that sluid in the animal economy. The writers

of antiquity, however, are sufficiently full and explicit on those heads \*.

It is true, that coolness of temperature is more necessary to be attended to in the warmer climates than in Great Britain, but the purity of the air is of equal importance in every situation; and this caution is to be particularly regarded in climates where the cold forbids a constant communication with the open air. The coldness of the liquors taken by the patient, is another article coinciding with the same intention, which is too little regarded by modern writers. Huxham, though he did not overlook this circumstance, was rather timid, and much too cautious of what he feems to have deemed innovation; though it was in reality returning to the ancient practice. Though sensible of the neces-

Adjungitur srigori inducto purgatior aer ingrediens locum, qui sua novitate ac miti accessu reficiat ægrotantem. Cel. Aurel.

<sup>\*</sup> See Indication i. 2. a. Aretæus expressly directs, that the air should be pure as well as cool. Καθαρος της, ψυχροιεςος, ες αναπνευσιν. Aretæus.

Cœlius Aurelianus alludes to the same in the following passage:

fity of restraining profuse discharges, by perspiration, he was averse to the application \*
of cold in any way for that purpose. Few
modern writers besides have noticed them,
Dr. Lettsom excepted. The ancient writers,
however, have paid ample attention to this
article †.

Food is another important confideration, too much neglected by modern authors. Huxham, indeed, has given fome directions on this head, which are fufficiently proper, and nearly agreeable to those recommended by the old writers, but scarcely sufficiently infisted upon. Sauvages has also mentioned some articles of diet, but seems to treat them rather as matters of course, than circumstances of importance. The foregoing comparative view will shew how attentive the ancient physicians were in this respect.

The support of the patient's spirits, by giving hopes and expectations of recovery, is of

<sup>\*</sup> Cold air, cold linen, cold liquors, or a cold regimen are greatly improper. Huxham.

<sup>+</sup> See Indication i. 2. b. See also the quotation from Galen, Indication ii. 1. a.

the utmost \* consequence in this disease, yet is very little attended to by modern practitioners. Dr. Cullen has given some useful hints, and, indeed, as much as was confistent with an elementary work, but I have not feen any thing of the kind in any modern practical writer. This, however, has not escaped the notice of Aretæus †, who recommends it very particularly. The same writer has also given several very proper directions concerning the amusement and entertainment of the patient's mind, by drawing off the attention from pain and mifery to pleasing objects, which circumstance is no less a proof of found judgment, than of humane sensibility.

<sup>\*</sup> Dr. Lettsom has noticed a remarkable passage in Sir Hans Sloane's History of Jamaica (vol. i. Introd. p. 31.), wherein he mentions a considerable difference in the facility of curing the severs of those who had many occasions of solicitude and concern upon their minds; and of the Indians resident in the same island, who having sewer wants, possessed fewer cares, the diseases of the latter yielding much sooner to the same remedies. Lettsom's Med. Mem. p. 5.

<sup>+</sup> See Indication ii. 4.

Some things, of apparently inferior concern, but by no means unworthy of regard, are noticed by Cælius Aurelianus. "The bed of the patient," fays that judicious writer, " should be in a proper medium, between softness and hardness: the first promoting perspiration too much, and the latter, by being uneasy, preventing sleep. The size of the bed is also considered and recommended to be fuch, as may admit of a change of place to a cool part, without the trouble of removing from one bed to another \*." The advantage of keeping the body in a quiet state, is very properly described by the same author, who very judiciously connects the rest of the body + with the composure of the mind. I cannot forbear on this occasion to recommend to every medical practitioner a careful perusal of what has been delivered by a most learned

Lecti etiam latitudo atque spatium tantum probatur, quantum sufficiat ægro, alterna conversatione alterius loci frigus accipere, ac desertum vapore carere, quo mutuâ vice semper veluti nova repetendo, frigida inveniat, ut sine ullâ lectorum mutatione, in eodem lecto mutatio fieri videatur. Cæl. Aurelian. L. ii. Cap. xxxvii.

<sup>†</sup> Jubentes eos quiescere, non solum corporis officio, sed si fieri poterit, etiam curâ animorum. Ibid. Cal. Aur.

and able member of this Society on this subject \*. The importance of these apparently minute, but, in reality, great articles, is there pointed out, and the superiority of the ancient to the modern physicians, in this respect fully evinced. I need only add, that Aretæus is the author to whom that gentleman alludes; and the directions which he, with so much reason approves, are to be found in what Aretæus says on the cure of the Phrenitis.

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<sup>\*</sup> See Memoirs of the Medical Society of London, vol. j. Article xxxii.

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# ARTICLE II.

A Case of Angina Pectoris, with a Dissection.

By SAMUEL BLACK, M.D. of Newry, IRE-LAND.

[Communicated in a LETTER to Dr. PERCIVAL,

MANCHESTER.]

READ, OCTOBER 24, 1796.

DEAR SIR,

The wish which you so obligingly intimated, that I would communicate to you any thing curious or interesting that might occur in the exercise of my profession, induces me to trouble you with some account of a second case of the Angina Pectoris. The person in whom it occurred, was Mr. Joseph Carson, a very respectable merchant of this town, a man whose life was marked by the strictest regularity and temperance, and, indeed, by every thing that was exemplary in conduct, and virtuous in sentiment. Mr.

Carson had never been liable to gout, nor to any other complaint, that which is the subject of this paper excepted. The first attack occurred above thirty years ago, when Mr. Carson was aged thirty-two. Being on horseback, riding very flowly, and being very inattentive to the management of his horse, the animal made a fudden and dangerous stumble, in consequence of which, Mr. Carson instantly felt, what he called, a fevere sting at the heart. The fensation continued, with acute pain, for a minute; but no fimilar feeling was experienced for a year. However, at the end of that time, on attempting to walk fast up a hill, a sudden and extremely violent pain in the chest obliged him to stand still for fear of instant suffocation. For several years the attacks were very unfrequent, nor did they excite that alarm which they ought to have done. In time, however, they became more frequent, and more severe, and were attended with a peculiar fensation, extending along the arms, which Mr. Carson compared to the rushing of a hot fluid. He now went to Dublin, in order to consult the late Dr. Smyth. The chief remedy recommended by him

him was issues. Two were accordingly established, and for four or five years much advantage was experienced from them, the attacks becoming less frequent, and less severe. Conceiving that the disease was now in a great measure cured, Mr. Carson, as imprudently as unfortunately, closed up the issues; in consequence of which, the complaint became much worse. He was, indeed, sufficiently prompt again to have recourse to the remedy which had before afforded so much relief, and the issues were re-established, but not with the same beneficial result as formerly. For the last twelve years of his life, the violence of the symptoms continued regularly to increase. But finding no relief from the advice of the most judicious physicians, and feeling a conviction of the fatal tendency of the disorder, he forbore the use of all remedies, except laudanum, very large quantities of which were rendered indispensable by the extreme severity of the nocturnal paroxysms. In the month of December last, these became of unusual violence, frequency, and duration. In the beginning of February, while fitting in the evening drinking some chocolate, he fell suddenly off his chair, and instantly

Stantly expired. You will readily believe, that I felt the most anxious solicitude to have an opportunity of examining the body. That liberty being permitted, the examination was made next morning.

## DISSECTION.

The cellular membrane was universally loaded with fat. An incipient offification was discoverable in the cartilages of some of the ribs. On opening the thorax, the mediastinum was covered with a layer of fat of unufual thickness and extent. There was an effusion into the pericardium, of a serous sluid to the amount of nearly four ounces; but none into either cavity of the thorax. The heart, on being handled, appeared found, and not lacerable, as in the case of Mr. Woodney \*. The aorta appeared somewhat dilated. The valves were found. On examining the coronary arteries, I found, with a mixture of fatisfaction and surprize, that they were completely offified through their whole extent. I cut them out, preferved them, and they are still in my possession. The more remarkable of the two, immediately after its origin,

<sup>\*</sup> Vide Mem. Med. Soc. vol. iv.

divides into two capital branches, the larger of these is a solid bone, the other, though apparently somewhat pervious, yet extremely offeous through its whole extent: and even the small ramissions from these capital branches were completely indurated and inflexible. The abdominal viscera were sound.

This diffection fuggests some reflections which appear to me to be of considerable importance: and, first, the remarkable coincidence (in what I conceive to be the essential point) with that of Mr. Woodney, is a circumstance very deserving of observation. It appears to me probable, that the true pathology of this disease may be more simple and uniform than has been commonly imagined, or than I have myself represented it in my paper on Mr. Woodney's case. If you defire me to state my opinion on this head, it is briefly this: - That the primary and original cause of the disorder is, perhaps, in every instance, the offification of the coronaries; and that the effusion of fluid, and the accumulation of fat, which diffectors have observed, are to be considered as the natural, and, indeed, the necessary effects of this offifi-

cation. When I say necessary, I would be understood to mean, when the disease has been of long standing. How effusion should be the consequence of diseased or obstructed vessels, is furely too obvious to require any illustration. The accumulation of fat is, I think, pretty clearly deducible from the same cause; the diseased state of the heart produces an impeded and weakened action of that organ; the blood is not propelled into the distant vessels with the force that is natural and necessary, the exhalation (in parts remote from the heart), and all the thinner excretions, are diminished, a plethoric state of the fanguiferous system is induced, and oil is deposited in unusual quantity, in the cellular membrane. This deposition of oil is much favoured by the patient's inability to use his accustomed exercise. The effects of issues, and of all remedies tending to keep up the thinner excretions, in palliating the fymptoms of this complaint, are best explained by this view of the subject.

It will, perhaps, be objected to this reafoning, that there are on record some dissections, in which no organic degeneracy whatever was discovered (Med. Trans. vol. iii.), and others, in which the effusion and the accumulation of fat were observed (Med. Observ. vol. v.), but not the offisication of the coronaries. To this I answer,

Ift, That the diffections relating to this disorder are by no means numerous, being all, so far as I know, contained in the two works already quoted. Of these few, there is one (the diffection of the body of H. R. Esq. by Mr. John Hunter) perfectly coinciding with the two which have fallen under my observation.

2d, With respect to those dissections in which the offification of the coronaries was not found, I observe, that the coronaries are small vessels, and that they do not lie altogether superficial, but are, in some degree, buried in the substance of the heart, for which reason, I think it very possible that their condition might pass unobserved, even by a very accurate dissector, if he were not particularly apprized of the necessity of attending minutely to that circumstance. For my own part, if I had not been on my guard with respect to it, I think it would have passed unnoticed by me in the two diffections of which I have now given you some account,

3d, I observe, that there are cases innumerable, both on record, and daily passing under our observation, as in the hydrothorax and empyema, in which an essusion of sluids does not excite the characteristic symptoms of this disorder; and with respect to an accumulation of fat, though cases of this kind are not so numerous, yet every person acquainted with dissections will acknowledge, that many such are to be found in which no such symptoms have been observed.

4th, I am unable to find on record any case in which the offification of the coronaries was really found, and the fymptoms of Angina Pectoris were absent. Let it not, however, be supposed that I mean to impeach the accuracy of other dissectors, or to press my own observations with an unbecoming confidence; my wish is, that the point should be fully and clearly ascertained by future investigation. I expect, however, it will be found, that the usual simplicity and uniformity of nature prevail in this instance,; and shall only take the liberty of adding, that the same rules by which we are governed in classing the great phænomena of nature may, I think, be applied, with much advantage, in all attempts

tempts to establish pathological principles, viz.

" Causas rerum naturalium non plures

" admitti debere, quam quæ et veræ sint, et

" earum phænomenis exponendis suffici-

" ant."

" Ideoque effectuum naturalium, ejusdem

" generis, eædem affignandæ funt causæ,

" quatenus fieri potest."

I am, &c.

S. BLACK.

## ARTICLE III.

A Case of Hydrocephalus internus, terminating successfully.

By Mr. EDMUND PITTS GAPPER, Surgeon, Ewell, Surrey.

[Communicated by Dr. FERRIS.]

READ, APRIL 22, 1799.

THE number of cases on record, of recovery from this dreadful disease, being unfortunately very sew, will, I trust, be deemed a sufficient apology for my obtruding this case on the public; for every well ascertained sact, though comparatively unimportant in itself, yet, if it tends, even in the remotest degree, to elucidate an opinion, or detect an error, becomes of consequence to the cause of science.

The subject of this case, is a girl of twelve years of age, whom I was desired to visit, some time in the beginning of January last.

She was feized in the fields, while employed in picking stones, with universal pain, heaviness in her head, and dimness of fight. This last symptom I was not informed of at the time, and could get no other account from her, than that " she was ill all over." At this time there was not the least heat on her skin, or any symptom of fever; the pulse was scarce perceptible, and she appeared stupid and insensible; some gently opening medicines were ordered, and I saw her again in a few days, my affiftant having vifited her in the interval. I then found her complaining of sickness, and pain in her head, though not in a sufficient degree to excite in me an idea of there being any thing particularly extraordinary in the case. An emetic was administered, a blister applied to the nape of the neck, and the doses of opening medicines increafed, as costiveness was much complained of. She went on in this manner near a week, when all the fymptoms began to increase; the pain in her head became so acute, as to produce at times, actions of violence, which rendered confinement necessary, and the intervals were marked by stupidity; she was totally unable to bear an erect posture, and her dis-

tress was very great and affecting. These circumstances led to a more particular examination. I found the pupil of the eye dilated to its utmost extent, and absolutely immoveable, the pulse small and extremely quick, with a dry hot skin, a considerable degree of thirst, though the tongue was but slightly furred. A stupor, constant watchfulness, a sense of great weight in the head, sickness, obstinate costiveness, and small evacuations of urine, were prominent symptoms, and which led me to infer, that the disease in question could be no other than Hydrocephales internus. When I thought myself convinced of this fact, which was in rather more than a fortnight from the first attack, I was determined to make a trial of the effect of mercury, fo strongly recommended by Dr. Dobfon, although the late Dr. Warren of Taunton doubted its having any effect on this difease, and had thrown out hints, that the cases in which it was supposed to have succeeded, were not in reality Hydrocephalus internus, but arose from worms, or some other irritating cause in the primæ viæ. Now we know, from numberless facts, and, I can add, the testimony of my own experience, that collections

lections of water in the head have ever been attended with fymptoms exactly corresponding with those in the present case; and reasoning from analogy, we may safely infer, that the consequence of a certain set of symptoms in one case, will invariably be the same under similar circumstances, in another. Therefore, I think, I am warranted in pronouncing this case to be Hydrocephalus internus.

Under this idea, I now ordered half a drachm of strong mercurial ointment to be rubbed into the thighs three times in a day, as I thought it expedient to get the mercury into the system as soon as possible; and as heat and costiveness were to be obviated, I gave her powders of nitre and jalap every fix hours, and recommended a diet of the most light and simple kind. In four or five days, her mouth began to be affected, and a confiderable flow of faliva foon fucceeded, attended with a discharge of water from the nose, a circumstance which has been noticed by former writers on this subject. This course was steadily persisted in for full three weeks, with the addition of fifteen drops of tinct. E 3 opii, opii, morning and night, and which was gradually increased to forty drops at each dose.

At the end of a fortnight, from the commencement of the falivation, an evident abatement of all the symptoms had taken place; she could now sit erect, and had lost the sense of weight in her head; the pupil of the eye had, in part, recovered its contractile power; the stupor was in a great degree removed; the quickness of the pulse much abated; she flept, and had in a great measure recovered her appetite. Under these encouraging circumstances, the mercurial friction was continued another week, when I had the fatiffaction of feeing all the symptoms, except occasional fits of delirium, vanish. These paroxysms had continued through the whole course of the disease, but were now much reduced, both in force and duration.

On duly weighing all the circumstances of the case, I concluded that I had obtained all the advantages I could expect from the use of mercury; as there were evident proofs, from the disappearance of the formidable symptoms with which my patient had been afflicted, that the original cause was removed, and that a further continuance might induce too great a degree of irritability; it was, therefore discontinued. Fits of delirium still remained, to remove which, a blister was applied over the whole head, the doses of tinct. opii continued, and a grain and an half of emetic tartar administered every three or four days. After the third dose, the paroxysms ceased, and have not since returned; and she is now in as perfect health as before the attack. I must not omit to observe, that no worms were discharged in any stage of the disease, neither was there any strabismus.

It is a circumstance worth attending to in this case, that, together with the discharge from the salivary glands, there was also a very considerable one from the nose, and that a gradual diminution of the symptoms ensued as those discharges increased. I trust the successful termination of this case, by adding an important fact to the very sew on record, will tend to excite the attention of the faculty to the subject, and induce them to make further trials of mercury in this terrible disease; and probably, an early exhibition

of it, before the energy of the brain is too much diminished, may be attended with more beneficial effects than has hitherto been experienced; for, perhaps, its failure may in a great measure be attributed, to its being too long delayed. I did not think it advisable, in this case, to give calomel, on account of the constant sickness, particularly as the frequent doses of jalap and nitre answered the purpose of clearing the intestines sufficiently.

### ARTICLE IV.

A Case of a Boy who became of a blue Colour some Months after Birth.

[Communicated in a LETTER to Dr. JAMES SIMS.]
By ED. THOMAS, M.D. &c. St. KITTS.

READ, OCTOBER 7, 1799.

SIR,

I TAKE the liberty of transmitting to you a singular case of a boy, who, during a severe sit of sickness, probably communicated by his mother, became perfectly blue.

The boy at present enjoys, in appearance, a perfect state of health, is lively, playful, and active like other children. There is, however, an inexpressibly languid esseminacy in his look, or rather eyes, which are large and blue. His skin resembles that of a delicate semale labouring under scrosula; the colour of which, his father informs me, is still influenced by the vicissitudes of the weather,

and particularly after a glass of wine. An instance of this change I was once a witness to, which induced me to inquire into his case.

The following is the account I had from his father, Mr. Owen, a worthy and enlightened clergyman, of the sect of methodists, residing in the island of St. Christopher, which, if thought worthy a place in the Memoirs of the London Medical Society, will gratify,

Yours, &c.

ED. THOMAS, M.D.

Member of the R. C. of Physicians of London and of Copenhagen.

The boy was born in the island of Tortola, January 16, 1794, and for some months subfequent to his birth, was as healthy and vigorous as children usually are in the early periods of infancy; nor was there any striking deviation from a natural complexion observable during that time.

In the month of March, it became necesfary for his father to remove, with his family, to St. Vincent's; where, shortly after his arrival, arrival, his wife was taken ill of a bilious remittent fever, which terminated in an irregular intermittent, whose obstinacy bade desiance to medicine.

At length the lacteal fountain becoming vitiated, and incapable of supplying the child with the pabulum of health and life, he was attacked with tender bowels and diarrhœa, attended with uneafy, restless nights, and languor. Almost, at the same time, appeared, and increased progressively, an uncommon BLUENESS of the skin, particularly perceptible in the temples, neck, wrifts, and fingers. It was remarked, that the hue was always deeper, whenever the subject was most under the influence of a cold and moist atmosphere. Dry and ferene weather generally procured him relief. An almost continual palpitation of the heart, was another concomitant symptom. But what was more poignant than all to the feelings of a doating parent, was difficulty of respiration, frequently heightened into violent fits of asthma.

It would be endless to detail the several marks of surprize exhibited by strangers at the first moment of seeing him: however, one instance may be related, as it will prove a caution to medical men, who hereaster meet with such cases, and induce them to deliver their opinions with prudent deliberation.

Some little time after this change of colour, he was attacked with fever, on which account the garrison surgeon, who had been in the habit of attending the family, was called in, and his friendly and assiduous attention, experienced for some time; but the Charib war being then in its zenith, the duties of his station interfering with his private practice, he was obliged to give it up. Another gentleman of the faculty was fent for, who, on his' arrival, found the little sufferer lying in his mother's lap in a stupor. He examined him only with his eye, then called the father out, and, in as delicate a manner as possible, gave him to understand, that he must prepare for the worst. He requested him to look at his nails, temples, &c. and faid, that he was already comatose, that he had never before been a witness of so rapid and general a mortification. The father was immediately aware of his mistake, and endeavoured to remove it, by ascribing the cause of alarm, not so much

to the colour, as to the other fymptoms, but in vain; the learned and fagacious doctor's word was fate, the child must die. The old adage, "while there is life there is hope," occurring to the father, he immediately applied sinapisms to the child's feet, and a large blister between its shoulders. The means proved effectual; the fever intermitted, the heaviness disappeared, and wonted health and strength were in a short time restored to the patient.

The frequent alarms and danger all the inhabitants of the colony were exposed to, dictating the expediency of leaving it, he departed from that island, and removed to St. Kitt's, where he has since resided. On his arrival, the appearance of the child was the same, and created no less wonder and concern in all who saw him; but it has gradually disappeared, with all its disagreeable attendants. The child is now four years of age, and answers the description which I have previously given you.

#### ARTICLE V.

A Case of obstinate Hepatic Disease.

By J. C. LETTSOM, M.D. &c.

READ, NOVEMBER 11, 1797.

WILLIAM WARNER, a respectable surgeon and accoucheur, in the city, had always been temperate in his mode of living, and enjoyed a good state of health.

In April 1797, he had been much engaged in his profession, and exposed to the weather, which brought on a state of indifposition, and a mode of treatment, which form the following relation:

It was on the 22d of this month I first visited him; he had then been a few days only indisposed, which he ascribed to fatigue and cold. He then complained of considerable oppression and uneasiness about the region

of the stomach, extending with increased pain to each hypochondrium, and some tension of the abdomen.

He was directed to take small doses of antimonials, which proved emetic, and afterwards neutral salts in the lac amygdalæ. The abdomen was somented with the decoctum pro somento.

These not producing a sufficient laxative effect, the oleum ricini was successfully exhibited.

On the 23d, the symptoms appeared less ambiguous, the skin appeared tinged of a yellow colour; the urine also of the same colour, with increased pain about the region of the liver, and an hepatitis was obvious, which induced me to order venæsection, and calomel purgatives, with cooling medicines, and nutrition adapted to the disease. With the fever, connected with the disease, he occasionally suffered from a cough, and sometimes dyfuria; but most of the original fymptoms had subsided towards the end of May; the stools, however, continued to be of a pale clay appearance, the urine of a deep dark yellow colour, with dyspepsia, and fulnels

ness of the abdomen, not without considerable pain, as low as the pubis.

During the month of May, although he could enjoy a little exercise, he experienced considerable lassitude; and the stools continued pale, and the urine high coloured: he took chiefly at this time soap, rhubarb, and aloes, in pills, and occasionally bitter insusions; and although he was sometimes smartly purged, the colour of the stools did not much improve.

In July, the appearances had not much varied; the dyfuria, indeed, had increased, on which account, he took uva ursi, with medicines to produce effervescence, for the sake of conveying fixed air into the stomach. He seemed to find some relief from a decoction of ginseng; the dysuria at least was better, and the uneasiness and slatulence of the abdomen were mitigated. Occasionally opiates were given, but in no form did they appear to agree with the patient.

In August, there was an increased fulness of the abdomen, with tension and soreness almost universally; the urine nearly purple, and in small quantities, with pale sæces. I

had

had begun to give him small doses of calomel, when he consulted, at my request, Dr. James Sims, who joined the digitalis purpurea with the calomel. In September, his mouth became tender from the calomel, and it was omitted, and a decoction of rubia tinctorum, and sometimes bitter insusions and chalybeate wine were substituted.

Early in November, he took the extract and decoction of taraxacum with rhubarb, soap, and ox-gall.

In the month of December, Dr. Saunders, whom he consulted, advised the application to the side of unguentum hydrarg. fortis, which again induced a disposition to ptyalism, when it was left off. With all these medicinal aids, the patient found no essential benefit; the jaundiced appearance sometimes diminished, but the stools were never of a natural colour for the space of two days; the urine was high coloured, and he dragged on a miserable life, frequently incapable of moving from home; the abdomen, indeed, was rather less tense, but it felt, to the touch, like a drum, similar to peritonæal, or intestinal inflammation.

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In January 1798, he began to try the nitric acid, of which he took in gruel, or other fluids, a drachm twice a-day; and this he continued pretty regularly during February, March, and April.

I ought to have observed, that, from a state of original plumpness, he had gradually shrunk in the shoulders, chest, and lower extremities, but not in the abdomen, which continued full, tense, and somewhat enlarged.

During this long use of the nitric and nitrous acids, he appeared to gain ground; he was able to go abroad more frequently; the yellowness of the skin was rather diminished, and he imagined that the fæces were of a more healthy colour; but it must be confessed, that he continued emaciated at the extremities, and the abdomen too full; he mentioned, however, that he found no inconvenience from the mineral acid, and, upon the whole, suffered less pain in the abdomen.

Towards the end of April, the patient experienced so little salutary change upon the whole, that he began to neglect the medicine; and, and, in May, I think it was totally relinquished, and never after resumed.

In this weak, stationary, unhappy manner, he led a languid existence, just capable of creeping abroad to visit his patients in the vicinity, till near the middle of June, when a high degree of fever ensued: he was immediately confined to his bed, with pains almost univerfally, and more violently in the abdomen, with tension of the part, deep yellowness of the skin, and dark coloured vomiting. In this state I found him, with debility, dyspnæa, and a most rapid pulse; and apparently irrecoverable, after the tedious and painful affections that had preceded. About the fourth day of the fever, a diarrhœa was procured, and, for the first time during the space of fourteen months, the fæces were yellow, and loaded with bile, whilst the urine and complexion were lighter. These appearances, with the cessation of sickness, afforded a gleam of hope: little more now was done than to keep up the fecretions; and, happily, by the middle of July, the patient was in a most favourable state of convalescence, and has continued to improve ever fince: he has

F 2

regained

regained his former state of sless and complexion, and performs all his professional duties.

In reflecting upon the whole train of fymptoms and remedies, it is difficult to ascertain by what means the recovery was effected.

Certainly no medicine seemed to have any salutary effect, after the first inflammatory symptoms had been subdued, except the nitric acid; and this apparent effect was so trivial, as to induce the patient, wearied out with taking it, to leave it entirely; at this time he thought he found rather inconvenience than benefit. It must be premised also, that he began this acid, after using freely mercury internally and externally, a medicine defervedly recommended in hepatic obstructions.

In what degree, and under what circumstances, either of these powerful medicines
might have influenced the constitution of the
patient, and brought on the favourable
change, I am ignorant. The mercury he
had abandoned nearly six months, and the
nitric acid six weeks before the sever at-

tacked him, and produced a conflict which, under a fatal aspect, terminated in his recovery. This, however, is certain, that no termination, and but a slight mitigation of the primary symptoms appeared, till the febrile onset took place, and which followed long after any active medicine had been exhibited.

London, March 14, 1798.

Taken for example in the second of the secon

# ARTICLE VI.

Case of a remarkable and successful Termination of Scrotal Hernia.

By JAMES LEE, M.D. SPANISH-TOWN, JAMAICA.

[Communicated by Dr. BRODBELT.]

READ, FEBRUARY 24, 1800.

James, a negro, æt. 45, healthy and robust, was suddenly attacked with strangulated hernia. After much loss of time, I was called in to his assistance, and the usual means to replace the gut proving unsuccessful, I immediately had recourse to the operation, which admitted of no farther delay, as the symptoms were putting on a truly alarming appearance. The operation being begun in the usual manner, after careful dissection, I brought the peritonæum into view, which exhibited such an unhealthy appearance, as to give me little hopes of success. I then opened the

the fac, and divided it, though with difficulty, which brought to my more immediate view the real state of the gut, which was so affected with gangrene, that I thought it prudent to give the patient a chance of his life, by making an artificial anus in the groin.

The fymptoms after the operation were mild, confidering the nature of the case; and great attention being paid, by the administration of bark, and other antiseptics, with proper regimen, the man in a few weeks recovered, with no other inconvenience than what is experienced by passing the sæces at the groin.

About a year after the operation, I was fuddenly called to visit him: I found him in violent pain, particularly in the abdomen, shooting to the affected groin, and which was much swollen. He informed me, that no fæces had passed by the wound as usual for some days.

On examining the groin, I found that fuch an adhesion had taken place, as scarcely to admit the introduction of the probe, and I did not think it prudent to make use of force.

The abdomen was fomented, emollient dlysters were thrown up the rectum, and another attempt was made to cause the fæces to be expelled by the groin.

On the following day, the tension of the abdomen, and the pain and debility being increased, with singultus, vomiting, and other alarming symptoms, opiates were liberally administered; and towards evening, when a fatal termination of the disease was apprehended, the patient had a call to stool, and, to the surprise of every one, the sæces were expelled by the anus.

From this period all the unfavourable fymptoms subsided, and in the course of a very short time the patient recovered his former health.

The wound in the groin has cicatrized, and although there is much fulness there, yet the fæces have been expelled by the anus ever since.

The man is a mason, and undergoes consequently much bodily labour, but he suffers little inconvenience, and it is more than three years since this happy accident took place,

#### REMARKS.

There are few cases of Herniæ more remarkable than the foregoing, and which is rendered still more so by the favourable termination; and, I think it not improbable, that it was brought about by inflammation being by some accidental cause occasioned in the parts about the affected groin, which had produced an adhesion of the sides of the intestines, and subsequent erosion, which latter effect was assisted by the weight of the descending fæces.

May, 1797.

### ARTICLE VII.

A Case of Croup, successfully treated by Emetics.

By JOHN SMITH, Surgeon, C.M.S. and Member of the Medical Society of Philadelphia.

READ, MARCH 3, 1800.

June 7, 1795.

I VISITED Janet Bird, aged three years, of a florid countenance, in the third day of Croup. A dose of ipecacuanha had been given the first day of the complaint, which operating mildly, gave no relief.

The parents, fensible of the dangerous situation of the child, readily agreed to have any method adopted that would afford a hope of recovery.

Half a grain of tartar emetic was first given, and repeated every sifteen minutes for several times, without any effect. The following was then used:

R Tartar. Emetic. gr. viij. Vitriol. Alb. gr. xv. Aq. Font. ziß. m.

Of this folution, two tea-spoonsful were given every fifteen minutes, till it operated violently, not discontinuing its use till round lumps of mucus were discharged. One of these lumps was above an inch in length, though not so broad to appearance as some that were at first thrown up. In colour they resembled the white of an egg boiled, and were of a thick confistence. The child's breathing was perfectly relieved by the operation of the liquid, which was all used. The cavity in the scrobiculus cordis, in which a small hand could have been put at each inspiration, the convulfive motion under the chin, and shrillness in breathing were no more observed. The little patient laid, for some time, as if worn out by the operation of the emetic. At night calomel ad gr. viij. was given, a blister applied between the shoulders, and a powder of jalap directed in the morning. She was foon well, and has had feveral flight attacks fince, that have been removed by taking tartar emetic till the thick mucus is discharged.

Of fix patients that year (1795), I lost one. In the case that terminated fatally, no method

method I could contrive, would excite vomiting. Reflecting fince on the subject, I am inclined to think, that vomiting, even in that instance, might have been effected by pouring a quantity of warm water into the stomach by means of a funnel.

I am prompted to forward the foregoing to the Medical Society of London, from the difference of practice recommended in their 4th volume of the Memoirs of the Society, and that adopted in the above case; consident that effectual relief can be but rarely afforded, by means that will not occasion a removal of the mucous membrane that lines the trachea.

## ARTICLE VIII.

A Case of Opisthotonos, successfully treated.

By the SAME.

READ, MARCH 3, 18co.

December 19, 1796.

I VISITED a female negro, aged twelve years: her head was drawn to one fide; there was a great rigidity about the throat; she could scarcely swallow a tea-spoonful of a thick liquid at a time. The abdomen hard, and pushed forwards: the spine, particularly the lumbar region, bent back like a bow, to a degree that can scarcely be conceived by those who have not seen patients in similar circumstances: the rigidity of the arms was considerable; that of the lower extremities so great, as to render it impossible to bend them in the least degree.

After remissions of a few minutes, the muscles were so strongly convulsed, that she sprung

fprung up in the bed, and was often thrown entirely out on the floor. The spasms were preceded by a pain at the lower part of the vastus externus muscle of the right side; great complaint was also made of pain darting under the ensisorm cartilage. Skin cool and dry, pulse regular, rather active.

The patient complained about the third of a pain in the back of the neck. The above fymptoms came on about fix days before, and were then more violent than at any former period of her illness.

The whites infifted, that no injury had been received by the negro previous to her indisposition; on repeating my inquiries among the blacks, one of them observed, that her right leg had been burned three or four weeks before; that it had occasioned a kernel in the groin, and soon dried up. On examination, a scab, the size of an English shilling, was found on the tibia, just below the knee:—this I cut off with an abscess lancet, and found that the skin underneath was healed. I then made an incition of some depth, and applied a caustic the full size of the incrustation. R Sal. chalybis, gr. v. flor. zinci, gr. ij. m. secunda quaq. hora sumend.

With

With each powder a tea-spoonful of red bark was directed in brandy, an opium pill at night, and occasionally a tea-spoonful of a mixture of laudan. liq. zvj. ol. succin. rect. 5ij. an injection with tartar emetic in the morning, and the warm bath to open the pores.

The spasms returned only three times after the caustic was applied, which occasioned a large fore, that ran freely. The bark was discontinued, from occasioning a complaint in the bowels, and the powder of steel and zinc continued by itself, till z vs. of the composition were taken. I heard no more of my patient (being detained in another part of the country), till the twenty-fixth, when I was informed, that the rigidity was entirely gone; that there was a pain in the stomach, with costiveness and feverish symptoms, probably owing to the fore occasioned by the caustic, for which calomel, ad gr. x. was prescribed, and a mixture of laudanum and oil of amber to be taken with the bark. In a few days the girl could walk about, and was foon perfectly well.

### ARTICLE IX.

On the Origin of the Cow-Poxs

By JOS. HEAD MARSHALL, M.D. &c.

[Communicated by Mr. KING.]

READ, JUNE 16, 1800.

The very extraordinary affertion brought forward by Dr. Jenner, in his first publication on the cow-pox, namely, that that disease originates in the horse, and not in the cow, has occasioned much controversy. The following simple detail of a fact, that very lately came under my own observation, will, I think, tend greatly to elucidate it.

Being called to visit a young woman, who is a dairy maid at a farmer's, I found her in bed, complaining of a pain in her back, lassitude and thirst. Her face was slushed, and her tongue foul. Upon requesting her to give me her arm, I discovered upon the hand four or five large pustules, which, from

my knowledge of the disease, I immediately ascertained to be cow-pox. On the back of the hand there had evidently been a long scratch, on a part of which appeared the primary pustule; the others were very near it.

Upon making a strict inquiry, I found one of the cows had this disease, and that in several of the others, it was also advancing. On farther inquiry, I also found, that the farmer had a horse with sore heels in the stable, which his son always attended, who did not usually milk the cows; but that one morning, this cow being troublesome and restive, he had, to relieve the dairy-maid, milked her himfels.

From this plain and simple state of facts, the origin of the disease became, in this instance, very apparent, as it could be clearly traced from the horse to that individual cow which the young man milked, and through this medium to the dairy-maid, and thence to the rest of the herd.

JOS. H. MARSHALL.

# ARTICLE X.

A Case of Framboesia Guineaensis, or Yares.

By JOS. ADAMS, M.D. &c. of the Island of Madeira.

READ, JUNE 30, 1800.

In the latter end of September 1798, a young Danish nobleman, in the naval service of his king, was left at this island, his health not permitting him to continue his voyage to the West Indies. He complained of a slight but tolerably regular intermittent, attended, during the paroxysm, with a spasmodic contraction of the fauces. For this he found some relief in bark, the power of opening his mouth returning as the fever went off. This relief was only temporary, nor were other tonics attended with better fuccess. He took a grain of calomel daily for ten days, during which his mouth became flightly affected, and his fever completely left him. It however returned as his gums recovered, and recourse

was had to fal ammoniac, myrrh, and chamomile. These seemed to succeed after five days' use, but the remission of sever was attended with an universal pimply eruption over the face, and inflammation of the throat.

In the space of two days the eruption was universal, excepting on his hands and feet. The throat became ulcered, and the glans penis was covered with feveral fmall, but not painful ulcers. For feveral days the ulcers fpread on both these places, and the pustules continued to increase; his fever returned, and the throat and pustules of the face were attended with confiderable pain. The latter had arrived, in less than a week, to the fize of fmall-pox pustules; and the interstitial part of the skin being redder than usual, gave the whole very much the appearance of that difeale. The figure of the pustule was indeed fomewhat flatter, or rather more horizontal, the edges rifing perpendicular from the skin, and the furface being plain. There wanted also that appearance of indentation which very foon discovers itself in small-pox, and frequently in the chicken-pox also. The throat had precifely the appearance of a venereal fore throat, but was more painful.

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The continual increase of the pustules after those of the small-pox should have scabbed, precluded all doubts concerning that or any similar morbid poison. In order, however, to satisfy myself still further, I had removed the pellicle from one of the pustules, and, instead of the slough peculiar to the small-pox, sound only a rough sloughy surface attached to the subjacent cellular membrane.

By the application of aq. phageden. the ulcers on the glaus penis foon became stationary, put on a better appearance, and healed. It was therefore evident they were not venereal, and as there was every reason to believe the pustules only differed from these ulcers in being covered by a thicker cuticle, it was highly probable that the cure of them also was within the power of the constitution. It seemed, therefore, prudent to watch the disease, without attempting to interrupt it.

The cruptions continued to increase in number and size to such a degree, that the soreness, abstracted from the pain which was confined to those in the face, rendered life scarcely tolerable. Before the end of the month, my patient counted, beside a number of smaller ones, sifty-six large sores; some of which be-

ing of an oval form, were not less than from two to three inches in their largest diameter. He was beside this reduced to a skeleton; for though his appetite was throughout the whole better than could be expected, yet the state of his throat prevented his swallowing even liquids without very great pain. From this time no new ones appeared, and all of them began to scab. If therefore the disease was yaws, which I had long suspected, the prefent seemed the time at which, by the concurrence of most authors, mercury may be exhibited to advantage. The corrofive fublimate, though given in very fmall doses, was more than the stomach would bear: it was therefore given up almost as soon as tried; and, as most of the sores showed a disposition to scab, no other preparation of mercury was exhibited. The fever continued all this while with as much violence as before, and the state of the throat preventing the exhibition of bark by the mouth, it was given by clyster with an opiate. Though, at first, it did not lessen the fever, yet the general irritability of the constitution was much abated, and by degrees the fever subfided. The following had been the appearance and progress of the G 3 pustules:

pustules: the cuticle shrunk and hardened into a scab, with the pus underneath it; in this manner it remained for a few days, when a suppuration commenced at the edges of, and under the scab, from which matter issued, and either raised part of the scab, or was diffused over it, or attached to its circumference, and hardened upon it. This was repeated an indefinite number of times, and each time attended with a return of fever. If any hairs were in the neighbourhood of a pustule, they were so incrusted with pus as to make them appear white. The accumulation and hardening of matter over the scab, gave some of them the appearance of being studded with tubercles: in others, the accumulation was more regular, fo as to exhibit a horny appearance: the colour was, for the most part, of a light brown; but where blood was mixed with the pus, the complexion was redder. Wherever the inflammation ran high, the pus was thinner, and never hardened on the part. This happened only on a few pustules of the face.

In about two months from the first appearance of the eruption, the fever returned with as much violence as before the eruption, particularly

ticularly those about the face continued dry, and, in a few days, a flight separation of the edges of some of the scabs showed a found skin underneath I had therefore no doubt but that the return of fever was symptomatic of a new action taking place, namely, that of desquamation and the formation of new skin, as the former fevers had been symptomatic of eruption and suppuration. This difposition to skin was not universal, some of the pustules still continuing to extend in the manner before described. They were however few, unattended with pain; and the new suppuration, instead of extending round the whole scab, was confined to an inconsiderable portion of the edge. On removing any of the scabs, a fungus, covered in some instances by a thin cuticle, was found shooting out of the foveolus, that had been the feat of the flough.

The ulcer on the throat had made fuch ravages, that I was fearful the whole uvula would be destroyed. The left side was entirely lost, and what remained, instead of hanging in its natural form, was drawn by its muscular sibres to the arch formed by the right tonsil. The G4 voice

voice was as much affected as when the uvula is lost by a venereal ulcer. As the other fymptoms abated, however, the throat recovered nearly its original figure, and the voice its natural tone. Though the violence of the fever had now fubfided, yet it returned occasionally, and was constantly attended with a new suppuration in some of the pustules, or rather at a small point in the edges of some of them. The paroxysms lafted, at intervals, for three or four days; during which, however, the appetite continued, and, at the remissions, was that of a convalescent. At the end of fix months from the first symptoms of fever, and four from the eruption, most of the puftules, particularly those on the legs, and many about the body, had scaled off, the throat was nearly well, and this succession of symptoms was to be ascribed to the refources of the constitution, which was only supported, without any attempt at altering its actions.

I was unacquainted with yaws but by defeription, and my patient had been ten months absent from the West Indies before he felt any indisposition. During his stay there, all he recollected that might have exposed him to the disease was, that being once with a physician,

cian, who was visiting the sick negroes of a plantation, he was defired to keep at a diftance from one of them. It was therefore fortunate, that enough of the pustules still remained in a state of partial suppuration, to fatisfy Dr. Wright, who at this time touched at our island in his return to the West Indies, that the disease was truly yaws. As it was of the most violent species, the pustules being large as well as numerous, it may be right to distinguish between such symptoms as are peculiar to this state of the disease, and such as are common to all. The fever was much greater than usual, the generality of patients showing little or none; but this variety is not greater than the secondary stage of the venereal disease, which is often attended with fever, counterfeiting the intermittent. This fometimes goes off as the eruption appears, and sometimes the eruption is preceded by no fever. The spasm on the fauces must be confidered as an accidental circumstance. The disease does not usually attack the throat, but instances of it are mentioned \*. I have before remarked, that its appearance no way differed from the venereal ulcer on that part.

<sup>\*</sup> See Hunter's Treatise on the Venereal Disease, p. 383.

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The furrounding inflammation was indeed more confiderable, continued longer, and the pain was much greater. The following I confider as the genuine character of the difease, by which it may be distinguished from all other morbid poisons.

I have already remarked the figure of the pustules in their early stage. If at this time the cuticle is taken off, you find under it a rough whitish surface, consisting partly of flough, and partly of living animal matter. This I conjecture, because, on the closest obfervation, the pus appeared formed over the furface, and not at the edges only. Where the cuticle is left, the matter usually pushes out at the extremities, but so slowly as only to harden upon it. Suppuration is not constantly going on in any of the pustules, excepting where the inflammation is very high, as was the case in the face. In other parts, some pustules appear to suppurate at one time and some at another, but commonly several at the same time. Hence the drying and hardening of a scab is no criterion that ulceration has ceased, and that the part will skin. Even the same individual pustule will heal in one part while it spreads in another.

From the time, however, that the scabs begin to dry, may be called the second stage of the disease; and if at this time you break off the scab, you find a red fungus shooting up under it.

There were no pits left after healing in any part but the face. In these the inflammation was so violent, and the matter so thin, that, instead of hardening under or upon the cuticle, it proved more than any superficial dressing would absorb. Hence, instead of a scab we had an open fore, and instead of a fungus shooting up, the part skinned over, without any previous granulation. This is analogous to what I have observed in small-pox, and all other morbid poisons \*.

To give the character then in as few words as possible:—If in the early stage of the pustule you remove the cuticle, you are to expect a ragged but moist slough. In a later stage, if you remove the fcab, you will find a fungus, varying in shape, size, and colour, according to the period of the yaw. Where the inflammation is very high, you will neither have scab nor fungus; but when sup-

<sup>\*</sup> See Morbid Poisons, p. 117.

puration ceases, the part will skin over, and leave a pit.

Authors have generally remarked, that all the hairs near the yaws turn white. This was not permanent in my patient. He had indeed no hairs near any of the pustules that granulated. On the face, where pits remained, the hair was not renewed for more than two months. The few that then grew were of the natural colour. I have already remarked fome appeared white, from being covered with pus. These were about the eye-brows, and recovered their colour on being washed. This patient had the fair complexion of the natives of a northern latitude. It is probable that, in darker people, the hair may turn white, as we know it sometimes does after cicatrices from common wounds in the head, and as frequently happens in the black hair of other animals.

Having thus described the character of the disease, I shall offer a history of it, founded on observation, and leading to practice.

ift. The violence of the disease must be in proportion to the susceptibility of the constitution for it.

2d. When the susceptibility is great, it is likely to be proportionably permanent, and, as long as it continues, the matter of each pustule will infect those parts it comes in contact with. Hence the spreading of the same individual pustule or scab.

3d. That nothing will destroy the susceptibility of a part, or the whole constitution, but its full action. Hence,

4thly. Though the action may be suspended for a time, by exciting a different action, yet, the susceptibility still remaining, the action will return as soon as that which superseded it ceases.

To illustrate this theory the better, I shall contrast yaws with the only two morbid poifons to which it bears any analogy, without exactly resembling either.

The venereal is a poison of which the constitution is for ever susceptible, and which it has no power of curing in itself: consequently the matter from every ulcer affects the contiguous parts, and the disease is kept up for ever, or till a more powerful stimulus is applied; after which, on a fresh application of the infection, the constitution is found as susceptible as before. The small pox is a poison of which the constitution is no longer susceptible, after having gone through a certain fever and eruption, occasioned by the application of its poison. Consequently, from this time, the contiguous parts being insensible to the variolous irritation, all the pustules heal without spreading, and the constitution is found to have lost its susceptibility on a fresh exposure to the infection.

Of yaws, on the contrary, the constitution remains susceptible after the eruption and fever (if any happen to attend it) are completed. Hence, as in the venereal, the pus affects the contiguous parts. But this susceptibility only continues for a time, uncertain according to the difference of constitution, or state of it at the time. When the susceptibility ceases, the parts heal as in the small-pox, though more slowly, from the slow progress of all the other actions. When healed, the constitution has for ever lost its susceptibility for the disease.

In one point they all agree, namely, that they may be suspended for a time by another more powerful stimulus, but will show themselves as soon as the effect of that stimulus ceases. When it happens that the constitution is infected by absorption from a local venereal ulcer, the consequent disease will never show itself while the mercurial irritation which cured the chancre continues; but when that irritation ceases, the disease will appear in the skin, fauces, or bones \*.

In the small-pox, inoculation has taught us, that, after the infection is received by a constitution susceptible of its impression, the disease may be for a time superseded by some other irritation, most commonly an erysipelatous fever, or the measles. As soon, however, as these cease, the small-pox resumes its action, and continues its course.

In yaws, the progress of which is particularly slow, it appears that, even after the disease has proceeded to suppuration, it may be superseded for a time by mercury. But if that remedy has been applied before the sull action of the disease, namely, scabbing, has taken place, whenever the mercurial irritation ceases, the yaws resume its action, which

As this rests on a long deduction of facts and reafoning, the reader who has not previously studied the subject must be referred to Hunter on the Venereal Disease, p. 305, and Morbid Poisons, p. 235, & seq.

it continues as long as the constitutional sufceptibility remains.

To conclude, the constitution is always sufceptible of the venereal poison; so that the disease will spread till superseded by a more violent irritation; and return on a fresh application of the poison. The small-pox will cure itself as soon as the suppurative sever is over; and, with the disease, the susceptibility for it is extinguished for ever.

In yaws the suppuration, whether attended with fever or not, does not immediately relieve the constitution from its susceptibility to the disease: nor is there any remedy yet known that will cure it. But this susceptibility ceases by degrees, after which the parts heal, and the susceptibility never returns.

Though only the venereal is absolutely incurable, excepting by a remedy, yet all three may be arrested, at certain stages, without being cured.

That such is the nature of yaws, appears from every authority I have been able to find, and from my own observation. The anonymous and modest author of a paper in the Edinburgh Medical Essays, Dr. Hillary, and Sauvage, all agree, that if mercury is given before

before all the yaws are scabbed over, the best that can happen is a return of the disease when the mercurial irritation ceases; but all of them, as well as Mr. Hunter, mention very calamitous events that have sometimes followed the early exhibition of mercury. The two first mentioned writers (the only two practical ones) never seem to have left the disease to its natural cure, and differ much in their opinion of such a practice. Hillary, with his usual hastiness conceives it would always kill the patient; but the other has the modesty to believe it would probably get well of itself, though he never had the courage to try. Both agree that, after salivation, some of the yaws will obstinately resist, and that it will be necessary to rub them with caustic to the bottom.

Such was the exact progress of the disease with the Count, to whom mercury might be said never to have been exhibited, or to have been exhibited so slightly, as to produce no effect. When the scabs began to fall off, they continued to do so, several every day; but, on the arms, some remained, which it was found necessary to rub with caustic. Even these would sometimes ulcerate as fresh Vol. VI.

Perhaps they were not sufficiently cauterized. They were at last left to themselves, and healed spontaneously.

I should be unwilling to fix a practice from any fingle instance: but the present case, by the accounts of all the authors above referred to, and by Dr. Wright's authority, healed earlier than is usual, where the pustules are so numerous\*. I shall, however, not scruple to give it as a general caution, in all cases of ulcer or eruption, whether proceeding from morbid poisons or not, never to give mercury till the disease explains itself. Should it prove venereal, the remedy cannot be too foon exhibited. Should it prove a morbid poison of a different kind, it would be adviseable to wait as long as we can with prudence, to fee whether the disease is within the powers of the constitution, in which case it may be best to interrupt it as little as possible. If, on the contrary, we see no disposition to heal, and the disease rapidly gaining ground, though we cannot find a remedy more likely to fucceed

<sup>\*</sup> About thirty weeks from the commencement of the eruption.

than mercury, it should be given with great caution.

I cannot conclude this paper, perhaps already too long, without an enquiry whether the leprofy of the Jews was yaws or not. In these remarks I shall confine myself to the Vulgate, as much more pointed in characteristing the disease, though there is nothing in the Septuagint that contradicts it.

"When," says the divine lawgiver \*, " a man shall have a rising, a scab, or a bright spot;" this constitutes the early stage, when the pimple is just forming, or the cuticle broken off, fo as to discover the flough underneath, splendid from the exudation of a fmall quantity of matter, or when the matter begins to harden into a scab. In the second stage, viz. when the loss of the cuticle and contraction of the flough has showed a depression, so that the "plague was deeper than the skin," and the matter had encrusted the "hair, so as to turn it white," the disease was confidered as beyond a doubt, and the fubject pronounced unclean. But if no loss of substance appeared, and the spot was not lower

<sup>\*</sup> Levit. chap. 13.

than the found part, nor the hair altered, the fubject was to be shut up for a week, at the end of which, if the disease was stationary, seven days more were required. If the disease now became a dry scab, of a darker complexion, without having spread, it was to be considered a common scab, and the subject re-admitted into the camp. But if the scab had increased between the first and second examination, the subject was to be again secluded for a future examination, and if it then appeared that the scab continued to spread, he was to be pronounced unclean.

In the next stage, the excrescences being all white, and the hair also, the priest was directed to look for the red fungus underneath, and, if he found "quick raw sless in the rising," he was to consider the disease an old [or consirmed] leprosy, and exclude the patient accordingly.

Lastly, he was to determine when the patient might be considered as no longer infectious, and re-admitted into the camp. For this purpose every part of the body was to be examined, and if all the cicatrices were covered with a new cuticle, which, in this case, will be opake and "white," the subject

was to be declared clean; but if any of the fungus flesh remained uncovered, or covered only with a thin transparent cuticle (in both which cases the appearances will be that of "raw slesh"), the priest was directed to seclude the subject, till, on a future examination, every part appeared white, and then, after the necessary ablutions, he was to be readmitted into the camp\*. The rest of the passage relates to an old cicatrix, or an open fore of any kind, becoming the seat of a leprous pustule.

The above description exactly resembles yaws, and no other disease now known, in every material point: in the vesicle, or pustule; in the depression from the loss of the cuticle, and the contraction of the sloughy part beneath; in the subsequent sungus; in the disposition of the scab to spread; in the changing the hair to white; in the insectious property of the disease; in the slowness of

<sup>\*</sup> Dr. Mead supposes, that this last passage, ver. 12. and 13. relates to a different disease: but there is no foundation for such an opinion; and whoever carefully compares Dr. Mead with the text, will be convinced of the fallacy of the doctor's arguments.

its progress; and, lastly, in the constitution being equal to its cure. In most of these it differs from the Arabian leprosy (a disease well known in the islands), and, in many particulars, from the lepra grecorum.

It is most probable, by the prudent meafures purfued during the long march through the wilderness, that the yaws was altogether extirpated from the Jews before their arrival in Palestine. For though leprosy is spoken of in other passages; it was evidently a different disease. The cases of Moses and Miriam are not to our purpose, as they were both antecedent to this event. The case of Naaman (2 Kings, chap. v.) was evidently different. First, it was incurable by any human means, or by the powers of the constitution. Next, the universal whiteness, which was considered as a symptom of recovery from the former disease, appears in this to characterize its worst stage. For, after the malediction of the prophet, his fervant "went out a leper, as white as snow." Thirdly, this disease does not appear to have been infectious; else Naaman would not have spoken of the King his master as " leaning on his hand' (by which

which he must at least have been near his person), when persorming his devotions, or "worshipping in the house of Rimmon." Lastly, there is no intimation that Naaman's wife, or any of his family, were insected, or that his servant was apprehensive of being so.

It is however probable, that the two difeases, having the same name, might be confounded, and, when one of them had disappeared, the other might continue to be treated like the former. For though it still remains a doubt, whether the Arabian leprofy be infectious, and is a matter of certainty, that, if at all, it is very little so, yet that it is often hereditary, is univerfally allowed. For thefe reasons, probably too on account of the miserable appearance of some of the sufferers, it is the policy of most nations inhabiting warm climates, to exclude them from society. On this account probably it was, that the prophet did not go out to Naaman, but sent him a message into the street. For the same reason he might not permit his fervant to accept the smallest present; and, when he found that he had deceived him, pronounced the curse

on him, and "his feed for ever." This may appear a cruel sentence: those who think so should consider the punishment inslicted on the culprit as necessarily implying a disposition to the same disease in his progeny. But a careful examination of the passage will at once show, that the punishment was confined to the culprit. " Is this a time (fays the prophet, alluding to the distressed state of the country) to receive money and garments, and olive yards, and men fervants and women fervants."-But, perhaps, you look forward to a more settled state of things. "The leprofy of Naaman cleave to thee and thy feed for ever." Go, you have a disease which will exclude you from that intercourse with the world, by which only you could enjoy your ill-gotten wealth; nor can you expect your posterity to inherit it, as the law will preclude you from having any.

Of the four lepers mentioned at the siege of Samaria \*, we have no description. We find, however, that they were excluded from the city, and probably overlooked during the general distress. In this situation they re-

<sup>\* 2</sup> Kings, chap. vii.

folved to offer themselves to the enemy; which they did about twilight. Those who have seen the worst stages of the Arabian leprosy, need not be told how horrible the countenance appears. It is well known, that the round eyes, flat nose, red tuberculated visage, exhibits so much the aspect of a lion, that the disease has been called leontiasis, as that on the leg and soot has been denominated ed elephantiasis.

Four such objects as these appearing by uncertain light, unarmed, and without any of that hurry or agitation which attend deserters, might, in those days, very naturally suggest, to the outposts, the idea of supernatural agency; and, when the panic once became general, different reasons would be asfigned for it in different parts of the camp. I ought to remark, that there is nothing in this that invalidates the testimony of miraculous agency; the only unequivocal proof of which, as an ingenious and learned writer observes, is prophecy. Nothing less than inspiration could have taught Elisha, during a time of universal distress, that, on the following day, every thing would be abundant,

or the fall of the nobleman who doubted the truth of fuch a prediction. Thus the miracle is quite as complete, though less complicated; nor is this statement any way contradicted by the written account.

The leprofy of King Uzziah \*, appears also to have been incurable; for, immediately on its discovery, a successor was appointed; and we are told that the disease continued, and he lived in a separate house during the rest of his days.

<sup>\* 2</sup> Chron. chap. xxvi.

## ARTICLE XI.

A Case of an Extra-uterine Fælus.

By A. FOTHERGILL, M.D. F.R.S. &c.

READ, MARCH 16, 1801.

Sunt lachrymæ rerum et mentem mortalia tangunt. VIRG.

Some time ago, Mrs. Gunning, a middle aged woman, an inhabitant of the environs of Bath, confulted me on the nature of her case, concerning which she had had the opinion of various medical practitioners, and had taken sundry medicines without obtaining the smallest relief. The abdomen was greatly enlarged, particularly on the left side, attended with total loss of appetite, great thirst, constipation, tenesmus and frequent vomiting; urine very scarce and high coloured.

She had for many months undergone severe lancinating pains in the umbilical and left hypochon-

pochondriac region, darting through the small of the back, and returning at short intervals. These symptoms had increased so much of late that every effort to pass urine or stools, or to change her posture, gave her unspeakable torture. Her pulse hard, depressed and unequal, upper and lower extremities greatly emaciated, skin slaccid, countenance pallid, and expressive of the utmost distress.

As she had been married many years without ever having had a child, as her catamenia had disappeared about fixteen months ago, and being now in the forty-feventh year of her age, it was naturally supposed it could not be a case of pregnancy, especially as the os uteri had testified no such sign during the pains, and the usual period of uterogestation had so long elapsed. It was therefore generally concluded that the disease under which she laboured must be a dropsy of the encysted kind, particularly of the ovarium. The fymptoms however not according well with my idea of that, or any other species of dropsy, I resolved to examine more minutely into the case. Though an obscure fluctuation could be felt, yet the tumor was not so much circumscribed 3

cumscribed as in a dropsy of the ovarium, presented a more unequal surface, extended more towards the opposite side, and occasioned more pain on being pressed. I next proceeded to inquire whether, within the first month from the cessation of her menses, she had not felt an unusual sensation accompanied with nausea? Whether the abdomen did not afterwards begin to enlarge and increase gradually? Whether the breasts in the subsequent months did not begin to grow turgid? Whether a serous fluid did not afterwards ouze from the nipples? And finally, whether, near the close of the ninth month, she did not feel acute pains about the region of the womb, of a different kind from any she had experienced before, and attended with a sense of pressure and bearing down? To all which she answered in the affirmative.

From this view of the case, with all the concurring circumstances, I ventured to declare my sull persuasion concerning the actual presence of a child in the abdominal cavity, though not in the womb. Having privately informed her husband concerning the hopeless state of the case, of the impossibility of deliver-

delivering her without hastening her end, which indeed seemed fast approaching, I hinted that the only chance remaining was the dissolution of the child by putrefaction, and its being afterwards discharged piecemeal by one of the natural outlets, or by an abdominal abcess—a circumstance demanding extraordinary efforts of nature, rather to be hoped for than expected in the present case.

Convinced that nothing could be attempted beyond the palliative plan, I endeavoured to foothe the vehemence of her excruciating pains by a liberal use of opium, internally and externally, by the tepid bath, and by embrocating the abdominal region with warm camphorated oil. By these means, and by gradually increasing the opium till she took two drams a-day, the feverity of her sufferings was considerably mitigated. At length, a sudden diarrhœa came on, accompanied with a very profuse discharge of a mixture of blood and sanious matter, highly offensive. The urine began to flow copiously, and the swelling of the abdomen suddenly subsided to its natural pitch. All the fymptoms abated and she enjoyed a temporary truce. Having now reached the close of the seventeenth month of her pregnancy, being worn out with a long series of insupportable sufferings, what she had often wished for at length arrived, and she calmly yielded to her fate.

Her death happened in August last, during my absence in London. On my return, I found the body had been opened by an able surgeon, according to her own request made some months before. The uterus was found nearly in its natural state without any visible sign of impregnation; behind it was found almost the entire skeleton of a suil grown child, part of the bones had perforated the rectum, and the rest, by their pressure, had rendered the lumbar vertebræ quite carious. The urinary bladder was considerably thickened and contracted in its dimensions, the rest of the viscera did not, it seems, appear materially altered.

## REMARKS.

1. Intricate as the present subject is, it may possibly admit of some elucidation. In the mysterious process of generation, whether the seminal sluid be conveyed to the coppus luteum

by absorption, or only the animating aura exhaling from its more subtile parts, we need not at present contend, because the act of conception feems always to take place in the ovarium alone: In the critical moment of impregnation, it sometimes happens that by some unlucky incident the ovum, instead of being conveyed into the uterus ordained for its reception, attaches itself to the inner coat of the ovarium, or of the Fallopian tube, or of the abdominal cavity; where, like a parasitical plant, it takes root and arrives at maturity. Thus the germ of the misletoe, when deprived of its favourite oak, readily attaches itself to a neighbouring thorn; and thus the spur of the game cock is said to have been transferred to his head, and, by a curious though whimfical experiment, engrafted on his comb.

2. Extra-uterine pregnancy being very obscure in its nature, demands minute investigation, otherwise it is liable, as we have seen, to
be mistaken for a dropfy of the ovarium; but
it may nevertheless be distinguished by due attention to the history of the case, and the
signs already mentioned, and particularly by

its being attended with more intense pain and more formidable symptoms, except in certain rare instances, where the sœtus, enveloped in a gypseous incrustation, without exciting instances incrustation, has lain dormant many years without being discovered till after death.

- 3. But when the fœtus bursts from its inclosure in the ovarium or Fallopian tube, and increasing in bulk, acts by irritation and mechanical pressure, it deranges the female œconomy, injures and erodes the adjacent parts, and it cannot but produce exquisite pain and misery. This, in the present unhappy case, may account for the erosion of the vertebræ, the ulceration of the rectum, the contraction and thickening of the bladder, the difficulty of urine, the putrid stools, the violent tenesmus, &c.
- 4. The disturbance occasioned by the extrauterine fœtus prompts Nature to exert all her
  powers to expel the unwelcome intruder. In
  a few rare instances she happily succeeds, but
  far more frequently fails in the attempt, and
  the violence of the conssict proves fatal both
  to the embryo, and its mother. At the usual
  period of delivery, she calls forth all the
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  I energy

energy of the uterus in producing strong labourpains. These proving fruitless, she tries to
dissolve the extraneous body by putrefaction,
and by subsequent suppuration to form a convenient opening for its complete expulsion. At
other times, she encases it in a stoney incrustation, which preserves the embryo, and protects
the neighbouring organs from putrefaction.

5. It may not be improper to add that, in certain difficult labours, the gravid uterus is accidentally ruptured, and the fœtus escapes into the general cavity. This dreadful accident is known by the exquisite pain it occafions, and by forcing from the unhappy fufferer a loud shriek. The labour-pains instantly cease, a profuse flooding ensues, followed by cold fweats and fyncope. In this critical fituation, ought delivery (according to the common practice) to be immediately undertaken though the os uteri be not properly dilated? Or ought we not rather to wait for that event? Does not the immediate stop put to the labour-pains point out the propriety of this? That eminent acoucheur, Dr. Garthshore, in his elaborate paper in the 8th vol. of the London Medical Journal, mentions no less than ten cases of this kind, wherein he

had

had been consulted; and observes, that most of those have died where the delivery was hastily undertaken, and that many have recovered when left entirely to nature. Whence it may be also inferred, that such deplorable accidents are neither so uncommon, nor yet so constantly fatal as is generally imagined. If many furvive a rupture or laceration of the" uterus, it surely affords no mean argument in favour of the Cæsarian operation, unless it can be proved, that a lacerated wound is less dangerous, and heals more kindly than one performed by a very sharp instrument. Bianchi relates a remarkable case of a woman who became pregnant, at three different periods, of three separate extra-uterine children, all which died in the early months of pregnancy, became putrid in the body, and were all extracted through an ulcer in the umbilical region. The woman, he adds, not only recovered completely, but became fruitful afterwards.

M. Tenon, eminent for his long experience, assures us that in all extra-uterine cases, and in the greater part of those where the child has burst either wholly or partially through the

uterus, the French accoucheurs constantly extract it through the divided parietes of the abdomen; confidering this as by much the safest practice. He adds that the Cæsarian operation is much less successful in this country than it is in France, because we defer it too long; and he further assures us, that since their first practising this operation, in the time of Bauhin, seventy-eight women have been faved by it at the Hotel-Dieu of Paris. It moreover appears, that this is the present method of practice, not only in France, but in Germany, and the Low Countries, established, on what is conceived to be the fure test of experience, and declared to be the only means of faving both mother and child.

In the 2d volume of Memoirs of the Medical Society at Paris, we have an account of two fuccessful Cæsarian operations, and in the Journal de Medicine for August 1786, of the total extirpation of the uterus. If we may credit these reports then, the Cæsarian section is not necessarily so satal as some have been led to imagine. To conclude. Since those unfortunate cases of extra-uterine pregnancy can neither be foreseen nor prevented, much less remedied when known, by any means short of this operation,

it becomes an object worthy the serious confideration of our English practitioners, whether the chance this may give of a cure, may not be greatly preferable to that long protracted misery and distress which the unfortunate sufferer inevitably must undergo from her extra-uterine burthen; should she even be successful enough to survive its expulsion piecemeal through the parietes of the abdomen, or by the intestinal canal.

Bath, October 24, 1800.

## ARTICLE XII.

A Case of inverted Uterus after Parturition.

By THEOPHILUS DYSON, SURGEON, F.M.S.

READ, MAY 11, 1801.

EARLY on the morning of the first of January last, I was called to attend the wife of Mr. N. in the city. She had been brought to bed about an hour before of her eighth child. The midwife who had delivered her of all her children informed me, that she had had a good natural labour, as usual, but that she found the placenta adhering so firmly as to induce her to defift from any further effort to extract it, without calling in professional assistance. I found the patient, who was about thirty-fix years of age, (a short made woman, rather corpulent and of a sanguineous habit) low and faint, with a feeble pulse. There had been a good deal of hæmorrhage. I ordered her to have a draught of porter, and

fat down to examine what state she was in. Although she had felt no pains for some time to affift the expulsion of the placenta, it was protruding confiderably into the vagina. The funis was yet firm; I therefore urged with gradual force to extract it without introducing the hand, in which I very foon succeeded. I observed it to be the thinnest and most expanded I had ever met with, much refembling a pancake, and apparently having embraced the greater part of the internal cavity of the uterus. My patient now complained of great pain, as if something was still forcing from her. I was about to introduce my hand into the vagina, to bring away any coagulum or detached substance, which I supposed might cause this uneasiness, when it was presently met by a firm round body of considerable fize, the nature of which I did not immediately comprehend: a few minutes more examination, however, convinced me that it was the uterus inverted; for by carefully gliding my hand around the fubstance thus protruded, I found that the cervix uteri, now become the fundus, as it were, entirely excluded all farther progress of my hand up the vagina. There was now very little hæmorrhage. The after-pains continuing, rendered the body of the uterus fo firm and resisting that I did not attempt to replace it for near a quarter of an hour. By this time the pains subsiding, I closed the singers of my left hand into a pyramidal form, and thus applying them to the central, and depending part of the inverted organ, gently pushed the hand upwards, and without any difficulty readily returned the uterus into its natural and prissing state.

The patient became immediately easy, had no severer after-pains, nor greater lochial discharge than usual; but recovered as well as after any of her former labours, and without any particular complaint during her confinement.

THEOPHILUS DYSON, Surgeon. London, March 28, 1800.

Mr. Dyson begs leave to add, that since the above case was drawn up, and read before the Society, he has attended the delivery of Mrs. N. of another child on the 31st of August last. The labour was quick, but the placenta slow in coming down, and preceded by very considerable hæmorrhage, which indeed

deed occurred on every former similar occasion. After about an hour's moderate endeavour for extraction, without introducing
the hand, the placenta came away whole, of
the ordinary dimensions and thickness; the
uterus remaining in its proper position.

New Basinghall street, 10th Sept. 1801.

## ARTICLE XIII.

An Account of an extraordinary Mass of Disease found in the left Cavity of the I horax.

By J. CARDEN, Surgeon to the Worcester Infirmary, &c. F.M.S.

READ, MAY 25, 1801.

Upon removing the sternum and cartilages of the ribs, in the exposed space was seen a white fatty-looking substance, which concealed the heart and lungs. It extended over most of the left cavity of the thorax, and a little beyond the edge of the sternum, on the right side, adhering most sirmly to the pleura costalis. The heart was completely excluded from the left side of the thorax, its apex, (the basis and apex lying in their usual direction) not quite reaching the right edge of the sternum; the left lung was compressed to the size of half a small hand, and the diaphragm on its left side and center, protruded towards

towards the abdomen in a deep pouch. Underneath the white substance, and several inches from its surface, lay a considerable quantity of ferum and coagulated blood, contained in a cyst. The cyst was smoothly lined, composed of layers of a brownish coloured lymph, and and covered exteriorly by a thin white capfule. The blood confifted of numerous distinct lumps. At the posterior part of the cyst, and inseparably connected to it, lay the left lung, which had fuffered no other alteration than its reduction in fize, and the loss of its spongy texture; and its pleura was not thickened. In the posterior part of the left cavity of the thorax, and firmly adhering to it, was a mafs of tough coagulated lymph, of a brown colour, and laminated structure, nearly equal in fize to the half of a found lung. The pleura costalis of the left side was thickened. The right lung was reduced in fize proportionally to the encroachment suffered by the right cavity of the thorax, it was perfectly found in its structure, and the only mark of disease in this side of the thorax, was a small elongated adhesion between the pleura pulmonalis monalis and costalis. The heart appeared small, but presented no mark of disease in any part of it. The aorta and venæ cavæ were in a natural state. The right branch of the pulmonary artery, was somewhat contracted in its capacity, and its coats were diminished in thickness. The left branch was so diminished in size, that its diameter was a third less than that of the right branch, and its coats, resembled those of a vein. The left pulmonary veins were very much dwindled. No trace of any rupture of vessels appeared in any part of the left cavity of the thorax.

The abdomen contained about two quarts of brown ferous fluid, and there were marks of flight inflammation in the lower part of the small intestines, and several very considerable contractions in the colon, without any alteration of structure in the contracted parts. The left lobe of the liver was thrust considerably forwards and downwards by the protrusion of the diaphragm, so as to be thought, from seeling it externally, to be much enlarged.

The subject of the disease, was a tall robust man, aged thirty, who, upon the day of his admission admission into the Worcester infirmary, expired fuddenly as he was walking along the ward. His face and legs were anasarcous, and he breathed with difficulty. He had not been under the care of any medical practitioner, so that an account of his illness could be got only from his wife. He had been ill at least a year, having a cough, pain in the left side, and a shortness of breath, very slight for some time. His appetite did not fail till a week before he died, and his strength was fo little impaired, that he was able to follow husbandry work till within ten weeks of his death. His complaints were twice much increased, by washing sheep, and getting in hay during a flood. In the last month of his life, his legs began to swell, his urine was scanty, he was costive, had pain in the bowels, and his belly was very fore to the touch. A fortnight before his death, his face became bloated, and he had mild delirium at night. He complained of feeling a great load in the left breaft, but never noticed his heart's beating on the right side. He preferred leaning over the back of a chair to any other posture, and could swallow his food better in this attitude.

From the degree of strength which the subject of this case possessed for so considerable a time, during the progress of the disease, it would appear that little irritation was given to the fystem by the diseased action which produced the tumour. It was not till the last month of the man's life, that his legs became dropfical, and his face became so only in the last fortnight, though the returning blood and lymph must have been liable long before that time to great obstruction, from the situation and size of the tumour. The water in the abdomen was probably produced by inflammation. The white substance, which formed the principal part of the tumour, and would feem to have been a particular form of coagulated lymph, had a very greafy feel and appearance, but on boiling it no oily particles were extracted, and it lost entirely its fatty appearance and brittle texture, becoming tough, and not unlike boiled veal. A substance similar to it, is taken notice of by Morgagni, as having been found in aneurisms. A similar substance to the mass of brown laminated lymph, I suppose that to have been, which is termed moles quædam carnea, in a case related in the Sepulchretum Boneti,

lib. ii. sect. 2. obs. 4. addit.; and this case in its fymptoms, and in the tumour being fituated in the thorax, and proving fatal from its size, resembles much the one before us. With regard to the blood (which from its confisting of separate lumps, may be supposed to have escaped at different times) in not having been found to proceed from any rupture of vessels, it is fimilar to a circumstance that has been noticed by Dr. Baillie in his Morbid Anatomy, where he observes, that " cases have occurred, although very rarely, in which a large quantity of blood has been accumulated in the cavity of the pericardium; but where no rupture could be discovered after the most diligent fearch, either in the heart itself, or in any of its veffels."

## ARTICLE XIV.

History and Dissection of a Case of intestinal Ulceration, with Remarks.

By H. FIELD, SEC. M.S.

READ, JUNE 22, 1801.

A PHYSICIAN now living, highly esteemed for his medical science and publications, has justly observed that "the recital of cases which illustrate the state of the body in any particular disease, either by making known the appearances which take place in the patient when living, or which are found on dissecting the body after death, and which are different from those in health, is of great importance toward the improvement of medicine."

With this view I beg leave to submit to the Medical Society the following case, which has no other claim to attention, but what is derived from accuracy of observation and a strict attention to facts.

Mr. G-H-, aged thirty-four, a ftout, well made, muscular man, had formerly been in the army, and, having been taken prisoner by the French during the government of Robespierre, was thrown into prison with a considerable number of his countrymen, where he remained about two years, and during that time was literally almost starved, having, for the greater part of it, nothing but bread and water for food, and bed and cloathing very inadequate to defend him from the frequent inclemency of the season in which he was confined. Add to which he laboured for a confiderable part of this period under a chronic dysentery. In consequence of fimilar hardships a great number of his comrades funk, but, by the aid of a remarkably good constitution, he happily survived, and at length returned to his native country. For the space of two or three years after this, he appeared to enjoy good health, with the exception of an occasional eruption of a dry herpetic aspect upon his hands, and which, when it subsided, was followed by finking of the spirits and nervous depression.

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For feveral months previous to his death his friends observed him to diminish in flesh; he looked unhealthy, and there was a certain melancholy upon his mind, which was very unnatural to him, as he was possessed of great fortitude, and firmness of animal spirits. During this time his body was irregular as to stools, occasionally too much relaxed, but more frequently the reverse; and he complained much of nausea and indigestion; he applied for no regular medical affistance, but is understood about this period to have had recourse to advertised medicines; he is known to have taken Dr. James's powders, Spilsbury's drops, and probably other remedies of that description unknown to his friends.

About a fortnight before death, his nausea increased to frequent and painful vomitings; he laboured under a distressing sensation of heat both in the stomach and cophagus, in so much that nothing but the coldest liquids were grateful to him, and water more so than anything else; his sufferings both in body and mind were very great, but more from the constancy of his pain, than from the acuteness of it, the seat of which he always described as being in the region of the stomach. After a

few days passed in this manner, convulsive affections of the muscles came on in various parts of the body, particularly in the face, which gradually increased to a considerable degree of violence; and at intervals he was very delirious. His tongue was generally dry, and of a reddish brown hue, giving reason to expect an aphthous eruption. His pulse was regular, firm, and very little quicker than the natural state, until within three days of his death, when it suddenly became very frequent, and proportionably weak; and thus it continued to the last. From the Wednesday night previous to his death, he lay in a fettled state of comatose insensibility, till Thursday at noon, and either in this state or in convulfions, he remained with a few short intervals of recollection until his death, which took place early in the afternoon of Saturday 20th Dec. 1800.

During the two last weeks of his life, he had the best medical advice. Emetics, laxatives, neutral salts, sedatives, vesicatories, somentations and poultices were administered, but without producing more than a temporary alleviation of symptoms. Nourishment he sometimes took with much eagerness, but at

other times, either from inability or difinclination to swallow, he resolutely resuled it. There was no material obstruction to the passage of sæces.

His body was opened about fifty hours after death. The stomach, liver, gall bladder, and spleen were perfectly sound and free from disease, as were the duodenum, jejunum, and upper part of the ileum, as also the larger intestines; but in the lower part of the ileum, immediately above its junction with the cœcum, for about the space of eighteen inches, there was found sufficient cause to account for this train of symptoms.

The external appearance of it was such as to give strong indications of great internal mischief; several indurations might be selt through the coats of the gut, which was contracted and livid, but not perforated. Upon opening the diseased part, it was found internally studded, through its whole extent, with alcers of various sizes from that of a bean to above that of a half crown piece; circumscribed, but very rugged from a great quantity of sungous substance thrown out both upon their surfaces and edges, from all which

circumstances it was impossible not to conjecture them to have been of a carcinomatous nature.

The history now recited affords two practical remarks. The one is, that diseases of the abdominal viscera can be but very imperfectly understood from the description given by the patient of the seat of the pain, which was here uniformly stated to be in the vicinity of the stomach, though it will sufficiently appear from what has been already said, that this organ could not be primarily affected, but only secondarily from sympathy with more distant parts.

The fecond remark is, that when those symptoms of visceral disease, which are usually denominated dyspeptic, continue for any considerable length of time, especially if they do not readily give way to the usual tonic and corroborating plan of treatment, it may be fairly inferred, that they are not the consequences of mere debility or irritability, but depend upon some more fixed and local organic affection, and therefore necessarily afford a more uncertain and unfavourable prognosis.

It must be sufficiently obvious from the condition of the parts as discovered by dissection, that n the latter stage of the disease, (in which only medical affistance was applied for,) no human means, in the present state of knowledge, could have afforded a rational prospect of cure: how far the progress of the malady could have been arrested by a more early application of remedies, it is impossible to fay; it is highly probable that its foundation was laid in the hardships which the patient underwent while a prisoner in France, more particularly when it is confidered that, for a considerable part of that time, these hardships were aggravated by so formidable a disease as the dysentery.

I believe it will not be denied, that the appearances after death were fuch as are not frequently to be met with. I have examined feveral anatomical authors, but have scarcely been able to discover a similar instance. Dr. Baillie, speaking of a schirrous state of the stomach, approaches perhaps the nearest to it of any \*, he observes "that it very frequently happens, that this thickened mass is ulcerated

<sup>\*</sup> See Morbid Anatomy, 2d Edition, p. 143, and

upon its furface, and then a stomach is said to be cancerous; sometimes the inner membrane of the stomach throws out a process, which terminates in a great many smaller processes, and produces what is commonly called a fungous appearance; and he afterwards describes nearly the same circumstances when speaking of similar diseases in the intestinal canal \*. Lieutaud informs us that in the diseases of a man sixty years of age, carried off by dysentery, he discovered the internal surface of the colon and rectum ulcerated, schirrous and callous.

The descriptions given by Sir John Pringle, Dr. Cleghorn, and others, of dissections after fatal dysenteries, have but a distant resemblance to the case in question, and indeed the morbid appearances in those are more usually confined to the rectum and larger intestines.

If any thing is to be attempted toward preventing the occurrence of so alarming a train of symptoms, as have been here described, it must be by checking the progress of the disease in its early stage, at which period due discrimination unfortunately appears so diffi-

<sup>\*</sup> Lieutaud Hist. Anatomico-Medica, Lib. 1. Obs. 359.

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cult, as to be almost impracticable. The following plan of treatment I should consider as affording the most rational prospect of success -frequent local bleedings by leeches or scarification, repeated at due intervals, interpofing fomentations, and vesicatories, applied to fuch part of the abdominal region as appears most likely to be the seat of the disease; and, as internal remedies, mercurials in small doses, with cicuta; keeping the body foluble with ol. ricini, manna, or fome other gentle laxative. As the effect of the remedies must necessarily be slow, and not sufficiently obvious to be easily ascertained, they should be patiently persisted in, both externally and internally, for a confiderable length of time, encreasing the quantity of cicuta as far as the system will admit. The diet should be light and of easy digestion, consisting of milk and farinaceous vegetables, with a moderate proportion of animal food, and a total abstinence from spirituous liquors.

## ARTICLE XV.

History of a peculiar Morbid Appearance of the Heart.

By JAMES HUME SPRY, Member of the Royal College of Surgeons, &c. F.M.S.

READ, FEB. 1, 1802.

The subject of the present dissection, was the body of a young woman seventeen years of age; she was greatly emaciated, and of a very dark, swarthy, or livid colour. The superior and inferior extremities, and particularly, the singers and toes, partook most of this livid appearance; in the latter, it approached nearly to black.

From every part which was wounded by the scalpel, a very dark coloured blood was discharged, and it seemed to me that the venous system was preternaturally loaded with blood.

In the cavity of the thorax, the first morbid appearance which was observed, was a very very firm adhesion of the pericardium, to the pleura costalis. The pericardium when opened, was not found to contain any sluid; but the heart was remarkable, both for its great size, and weight;—to the touch, it selt extremely hard; and resisted the pressure of the hand, as if it was much distended by some elastic body.—The hardness, and distension of the heart, was found to proceed from an enormous quantity of blood, in a dissolved state, of a very deep purple colour, which distended equally both auricles, with their corresponding ventricles. The great arteries and veins likewise partook of this distension.

When the heart was carefully examined, a material defect in its organization was difcovered.—The foramen ovale which is always necessary to the occonomy of the foctus before it has respired, after birth becomes of no use, and soon closes; which event seems to be of the greatest importance to our well-doing: so that, what is perfectly natural, and indeed absolutely necessary to our existence while in utero, after birth, so far from being of use, is absolutely pernicious; and if it should perchance remain pervious, must eventually

tually be attended with fatal confequences .--In the case of this young woman the foramen ovale was pervious, and very nearly two inches in circumference: thus the heart was incapable of performing its functions, as it ought to do in the adult; and therefore, the blood, instead of passing from the right auricle into its corresponding ventricle, and from thence, through the pulmonary artery and lungs, found a more ready paffage through the large foramen ovale, into the left auricle: part, however, must have entered the right ventricle, and afterwards have passed into the pulmonary artery. But here again was another impediment to its passage through the lungs. Notwithstanding the natural aperture in the fætal heart, between the right and left auricles, through which the greatest part of the blood passes, without flowing into the right ventricle; nature has provided a fecond, to carry off the small portion of blood, which will unavoidably flow into the right ventricle and pulmonary artery. This fecond provision of nature is the canalis arteriosus, forming a direct passage between the arteria pulmonalis, and aorta. This fecond passage. after birth, closes, as well as the foramen ovale: but

but nature had so far departed from her usual track, as to suffer it to remain pervious in this young woman; hence it will appear, that with two fuch impediments to the circulation of the blood through the lungs, it was utterly impossible for it to be exposed so compleatly to the action of the atmospheric air, as to render it sufficiently pure for the common purpose of life, as ordained by the Supreme Being.—When we consider that the heart of this subject, was similar in every respect to that of a fœtus in utero; and likewise the confequences which will most probably result from a circulation carried on in an adult fystem, through the medium of such a heart; we shall not be surprized at the blue colour of her skin which during life was so remarkable as to attract the attention of the bystanders.—The next diseased appearance in the heart, was an unufual white colour of its inner membrane, which seemed to be somewhat thicker than is commonly the case: this circumstance made the columnæ carneæ appear larger than they ought naturally to be .-The lungs, upon a minute examination, were found free from any visible disease whatever. I was led to make a particular examination of

the lungs, on the following account.-Where the lungs have been much obstructed, as in fome consumptive patients, the foramen ovale has been found pervious: and a very respectable gentleman (Mr. Abernethy) has feen this feveral times; the same gentleman has likewise observed the foramina Thebesii open from a fimilar cause. As the lungs of this woman were visibly free from any disease, it is not probable that the appearance of the heart depended upon obstructed, or otherwise diseased lungs, but was rather a primary disorder, and most probably it had never suffered any change fince birth. It is a very extraordinary circumstance, that she should have attained the age of seventeen years, with a heart so ill calculated to perform the functions requisite in the body of an adult: but she may be faid to have only existed; for health, which is absolutely necessary to our enjoying the comforts of this life, she knew only by name. In the cavity of the abdomen, the liver was the only diseased viscus. Its fize was remarkable, as it occupied nearly the whole of the right hypochondrium, and it extended over to the left, so as to occupy completely the epigastric, as well as the superior portion of the umbilical region. The texture of the liver was firm, and its colour natural. Upon the concave furface there was a large tumor, which at first fight seemed to contain matter or pus; however, this did not prove to be the case, but in the centre of the tumor was situated a tubercle of considerable magnitude: no other morbid part was observed.

It now only remains for me to give some account of the different symptoms, which this unfortunate female laboured under, previous to her dissolution. But the investigation, as I did not attend her, and as no journal was kept of her case by those who did, has been attended with confiderable difficulty. From her parents I obtained the following account: She had arrived at the age of feventeen years, without ever having menstruated, excepting once, a short period before her death. She was always from her birth remarkably dark. coloured, which gradually increased as she advanced to riper years. The colour of her face was fo remarkable, as to make the people who looked at her, notice it: and a girl informed me, when I was inquiring about her; that, " she always had a blue face," and likewise, " that

"that her tongue was very blue." She had continually a very acute, throbbing pain in her head; but confined principally to her forehead and temples. She always felt a great pain, and sense of weight in her left side, attended with constant palpitations of the heart. Respiration was performed with difficulty, and she had sometimes a very slight cough. Indolence was naturally to be expected, and she possessed it in an eminent degree. Upon any unufual exertion she was in danger of fainting, and it was with considerable difficulty that she got up stairs. Her appetite was in general voracious. The state of her pulse was not to be ascertained. It may not be amiss to mention, that some years ago she took the small-pox in the natural way, and she had the disease so very severely, as to have been in the most imminent danger.

The celebrated case of the blue boy, published by Dr. Sandesort, professor of anatomy at Leyden, has by many been considered as unique; the case which I have related above, certainly corresponds with it in many respects. In order to draw the comparison, I have extracted such portion of the history, as well as dissection, from Dr. Beddoes's obser-

vations on scurvy, as is necessary for the purpose.

The fymptoms appear to have varied very much at different times, but some were constantly observed; therefore, I have selected those only. Those who wish to be acquainted with all the different symptoms may be indulged in their wish by referring to the work above mentioned.

The symptoms constantly observed were,

Ist. Great dyspnœa upon motion; visible pulsations in the neck.

2d. A face too full for the habit of the rest of the body; during his laborious respiration a livid colour of the countenance, a protuberance, and occasional suffusion of the eyes.

3d. Urine high coloured without sediment.

4th. Great costiveness.

5th. Constant chilliness, even though the skin felt warm; this sensation never lest him, except after he had become quite warm in bed. In winter, though sitting close by the fire, he complained of shivering, and in summer he longed for a large kitchen fire, and desired to bask in the sun during the hottest part of the day.

6th. He was sometimes much relieved by opening medicines and by hæmorrhages from the nose, which happened from time to time.

The tongue was very foul; the breath extremely offensive (fœtidissimus).

Dr. Sandefort gives the following account of the diffection. The thorax alone was opened.

" The pericardium did not, as usual, appear furrounded by the lungs, and almost inclosed in them; but a mass was seen to fill nearly the whole cavity, and to compress the lungs extremely: this mass was the pericardium, containing the heart in a state of great distention, and very full of blood. It reached from the diaphragm (which on the right fide rose to the fifth, on the left only to the fixth rib) to the space between the first and second rib, and so entirely filled the lateral parts of the thorax, that only the anterior portion of the lungs on the right fide (viz. the margin of the superior and middle lobe), and but a very fmall portion on the left (viz. towards the upper and lateral part) could be feen.-Above the pericardium, the superior cava, with the origin of the fubclavian veins, appeared turgid with black blood.

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"Upon opening the pericardium, some water ran out; but not more, indeed not so much, as is sometimes found in subjects where no dropsical symptoms have preceded death.

"The heart, when freed from its fac, appeared excessively turgid, not however equably so; both the ventricles were not distended to the same degree; the right ventricle, as well as its auricle and sinus, were much more enlarged, and full of blood than the left; all the veins, which ramify from the coronary veins along the surface of the heart, were so dilated, even to their extreme branches, that the most successful injection could not have rendered them more distinct.

"The veins arising from the subclavian, more especially the jugular, were enormously distended with thin black blood; the superior vena cava, where it is lodged within the pericardium, did not much exceed its natural size; the inferior cava was enlarged; the pulmonary veins were turgid, but not exceedingly so; the aorta was enlarged at its origin; the pulmonary artery was remarkably contracted, from its origin almost to its bifurcation; of the arterious duct, or rather ligament, as it would

would have been at this age, there was no vestige.

- "The lungs, externally, had no morbid appearance, but they were small, compressed, and not easily dilatable; whence it appeared that they could not properly have performed their functions.
- "The external appearance of the heart shewed where the source of the mischief lay. After tying up all the vessels, it was submitted to further examination.
- "The right finus and auricle were first opened; a large quantity of thin black blood flowed out. In the foramen ovale there was an aperture, which would admit a large probe.
- "On introducing the finger into the right ventricle, and turning the point toward the orifice of the pulmonary artery, where it usually arises from this ventricle, no such orifice could be felt, but it easily slided into another, and that a very large one. But how great was my astonishment, and that of all the bye-standers, when it was discovered, that the finger had passed into the aorta, which, according to the ordinary law of nature, has

no communication whatever with the right ventricle.

opposite to the valve, behind which the arterious orifice lies, quite down to the apex. Upon lifting this valve a little, the large mouth of the aorta appeared, as also a smooth margin, beyond which the singer found a way into the left ventricle of the heart. Upon cutting the aorta transversely, at a proper distance from the semi-lunar valves, the same margin was seen to divide its orifice into two parts; the larger communicating with the right, the smaller with the left ventricle.

"The aorta therefore arose from both ventricles, and must have received all the blood from both.

"The pulmonary artery having been cut across above the valves, these appeared very small, almost grown to the artery, and covered with a granular substance, resembling a slessly excrescence, so that only area enough was lest to suffer a small probe to pass into the ventricle, and even this passed with greater difficulty from the ventricle into the artery. Upon opening the orifice longitudinally, we found

found only two shapeless valves, partly covered with the same granular excrescence.

"In the mouth of the aorta there were three valves; in the left ventricle there was nothing remarkable, except the aperture in the feptum, and the thinness of its substance, which did not exceed, and indeed scarce equalled, that of the right ventricle."

Although in some respects the appearances upon dissection were disserent in the two cases, yet in many other respects, they corresponded one with the other; and the effects produced by this mal-formation of the heart would be perfectly similar in both.—The circulation of the blood in both cases would be nearly the same—the larger portion of blood in Dr. Sandefort's case passed from the right auricle into the right ventricle, instead of passing into the pulmonary artery; it then passed immediately into the aorta; consequently, it never entered the lungs. A smaller portion would likewise pass through the foramen ovale, which in this case, though pervious, was very small.—In the other case a greater portion of the blood would pass into the left auricle through the foramen ovale, which was very large: L 3

large; and a smaller from the pulmonary artery into the canalis arteriosus, and aorta. In both cases the blood would never be sufficiently exposed to the action of the air of the atmosphere to render it sit for the common purposes of life.

## ARTICLE XVI.

A Case of a Wound in the Peroneal Artery, in which the Limb was saved by removing a Portion of the Fibula.

By THOMAS CROXALL CAM, Surgeon, Bath, Late Senior Surgeon to the Infirmary at Hereford.

[Communicated by Dr. FOTHERGILL.]

READ, FEB. 8, 1802.

JOHN PREFCE, about eighteen years of age, had the misfortune to have the peroneal artery wounded by the point of a scythe in the hay harvest, passing between the tibia and sibula, about three inches above the outside ancle. The hæmorrhage was very prosuse at the time of the accident, which was stopped by a neighbouring surgeon with compresses of lint, and a tight bandage. As soon as the compresses and bandage became slack, the hæmorrhage returned. The young man being

much reduced by the loss of blood, his friends defired I might be confulted. I accordingly met his surgeon on the seventh day. every thing remained quiet at that time, it was agreed that he should be moved to the Hereford Infirmary, as he lived at too great a distance to be attended in such a manner as the nature of the case required. Nothing happened till the fifth day of his admission, when the hæmorrhage returned, and notwithstanding the tourniquet was constantly applied, he lost more blood than might have been ex-On removing the dreffings, and loosening the tourniquet, in order to discover the wounded veffel, the blood fo immediately filled up the space between the tibia and fibula, which in that part of the leg lie near each other, that it was impossible to use the needle and ligature, or apply any styptic. Under fuch circumstances, and in fuch cases, where a wounded vessel in the extremities cannot be secured, recourse is had to amputation. But recollecting a note in Mr. Gooch's second volume of Cases and Remarks in Surgery, page 347, where on being consulted in a case of hæmorrhage after amputation, he says, " among

" among the rest of our chirurgical conversation at this meeting, mention was made of an accident in which one of the arteries, between the tibia and fibula was opened about the middle of the leg, and the bleeding stopped from time to time by various methods, but at last it was thought adviseable to amputate the limb. Upon réslection, it occurred to me that in this case, the removal of about two or three inches of the fibula was practicable, and probably it might have given a fair opportunity of faving the limb." From this hint I was determined, as there was no time to lose, to try the experiment. I laid the fibula bare, and after paffing a spatula underneath the bone, fawed off about two inches. On wiping away the blood, and loosening the tourniquet, the bleeding vessel was foon discovered, and easily taken up. The portion of the fibula that was removed had received a confiderable injury from the edge of the scythe. There was not any return of hæmorrhage after the operation. The young man's ffrength was foon recruited by the bark, elixir of vitriol, and a milk diet. The loss of bone was supplied by an intervening callus, and the cure perfectly completed in two months. He is now able to carry heavy burdens, to follow his hufbandry business, and the limb is in every respect, as strong and as useful as the other. I need not add, how much it is the duty of every surgeon, to use his utmost endeavours, on all occasions, to save a limb. In the successful event of this case, I claim no other merit, than by putting into execution the hint given by that excellent and ingenious surgeon, the late Mr. Gooch of Halesworth in Norfolk.

Bath, June 9th, 1801.

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## ARTICLE XVII.

Observations on the Medical Use of the white Oxyd of Bismuth.

By ALEX. MARCET, M.D. &c. SEC. M.S.

One of the Physicians to Guy's Hospital.

READ, APRIL 12, 1801.

The powerful effects of most of the metallic oxyds on the animal economy, and the success with which some new remedies of this class have, of late years, been introduced into medical practice, will, I hope, be deemed a sufficient apology for offering to this Society a few observations upon one of these substances, the medical properties of which are yet but little known, and have never, I believe, been submitted, in this country, to any regular investigation.

The substance to which I allude is the white oxyd of Bismuth, commonly known by the name of Magistery of Bismuth, and sold chiefly by perfumers as a paint for whitening the

the complexion. Being at Geneva about twelve months ago, I heard that this substance had for many years past been brought intomedical use by Dr. Odier professor of physick in that town, and employed there with considerable success, not only by him, but also by feveral of his colleagues in the treatment of a few spasmodic disorders, and more especially in the cure of a particular symptom of dyspepfia. I had then an opportunity of hearing from Dr. Odier himself the account of his observations on this medicine, and at my request, he was so obliging as to draw up the following concise but very conclusive note, which, for the sake of beevity, I shall transcribe in his own words.

"The magistery of bismuth is prepared by dissolving a quantity of very pure bismuth in nitric acid, and precipitating it by water, or by a solution of potash. But if the bismuth is not very pure, if for instance it is mixed with nickel, the precipitate is not perfectly white; it is then mixed with a greenish precipitate, which is nothing but an oxyd of nickel which water will not precipitate; for which reason we are more certain of obtain-

ing a pure precipitate of bismuth by water than by potash.

"I use this remedy with success in doses of six grains, four times a day, in all cases of spasms of the stomach, brought on by any kind of aliment, and proceeding only from the irritability of that organ. This complaint is extremely frequent at Geneva, particularly amongst servant maids who are in the habit of carrying water on their heads, and make great use of their arms.

"I have published my observations on this subject in two papers, one of which has been printed in the "Journal de Medicine," and in the "Journal Encyclopedique" of Paris for the year 1796; and the other, sent by Dr. Belcombe to the Royal Society of Gottingen, has been printed in a German journal from whence Dr. Murray has drawn, in his "Apparatus Medicaminum" a very detailed extract."

Dr. Odier, in addition to this account, affured me repeatedly that he had tried the oxyd of bismuth in much larger doses, and that he had never observed it to produce any bad effects whatever; whilst on the contrary, he had hardly ever known it to fail in effect-

ing a cure, when used in the circumstances that have just been mentioned.

The magistery of bismuth, it is proper to observe, had been at different times tried by a few foreign practitioners before Dr. Odier ascertained what may be considered as its specific effects; but they used it so sparingly, and under fuch prejudices arising from the notions they had formed respecting its deleterious effects, that, until Dr. Odier's more decisive experiments, nothing but doubts and distrust had arisen from those imperfect trials. As I mean to offer to the Society a few cases that have lately come under my own observation, I shall not prolong this paper by a repetition of the observations published in different foreign journals, by the ingenious professor of Geneva, who has himfelf pointed out, in the note that has just been read, the chief references upon this subject. But as I believe the concise and distinct account of this medicine given in Murray's "Apparatus Medicaminum \*," referred to by Dr. Odier, will be found more acceptable than any history or comment which I should be able to offer, I shall not

<sup>\*</sup> Vol. vi. p. 252.

fcruple to transcribe here the quotation at full length.

" Ab usu interno magisterii bismuthi præcordiorum ingentes furrexisse anxietates memoravit jam Pott Berolinis anno 1739; infaulto hoc effectu non deterriti, ausi tamen sunt medici, intus idem præscribere; contra morbos a nimia nervorum sensibilitate proficiscentes, potens in eo multoties deprehendit auxilium Odier\*, in ventriculi potissimum & partium cum eo maxime connexarum morbis, iis præcipue qui a nimiâ fibrarum ejus carnosarum irritabilitate pendent †, etiam fymptomatibus hystericis, colicâ, alvi fluxu, cordis palpitatione, doloribus capitis, stipatis, & maxime in gastrodynia; in hoc etiam morbo perinde ac in debilitate ventriculi in spasmos proni, & in ipso malo hysterico efficax expertus est Carminati 1; in doloribus ventriculi chronicis §; dolorum, quos schirrus pylorum obsidens excitaverat atrocissimorum infigne crebro ab ejus usu lenimen comperit

<sup>\*</sup> Journal de Médicin, Tome 68, Juillet 1786.

<sup>+</sup> Odier Gotting. anz. von. gel. Sachen. l. m. c.

<sup>1</sup> Opuscul. Therap. Pav. vol. 1. 1788.

<sup>§</sup> Bonat. Journal de Medicin, vol. 74. 1788.

Odier; in epilepsiâ tamen, aut convulsionibus solum nihil effecit, neque semper in ventriculi morbis cum viscerum tabe notabili aut aliis malis complicatis cum fructu adhibitum: ejus usu alvus alias obstipatur, alias justo magis relaxatur."

I shall now proceed to give a summary account of the few cases in which I have tried this medicine, and I shall make a point of mentioning, candidly and without any reserve, those instances, in which the remedy that I am recommending to notice, has proved ineffectual; a method which I confess I should wish to see more generally adopted.

## CASE I.

On the 13th of July last, Hannah Stillwell of Ilford in Essex, a married woman, thirty-eight years of age, whose employment consists chiefly in needle work, spinning and other sedentary occupations, applied to the City Dispensary for relief. She complained of a gnawing pain and great sinking at the pit of her stomach, which came on almost instantaneously after taking any food or drink, and was soon followed by sickness and vomiting.

She could only retard this for a few minutes by lying in a horizontal posture. In short, it appeared from her account, that only an extremely small portion of the nourishment which she took could be transmitted to the alimentary canal. Soon after vomiting, however, she again felt an inclination to eat. Her complaint had begun two months ago, and had continued ever fince. She faid she was a good deal reduced by it, and feemed extremely desponding; yet she was by no means remarkably emaciated. She complained of being generally very costive. catamenia and other functions were regular. A dose of castor oil was ordered to be taken directly, and a bitter infusion, in the dose of one ounce, three times a-day.

On the 21st the symptoms being exactly the same, the castor oil was repeated, and a mixture of magnesia, rhubarb and peppermintwater, was substituted for the bitter insussion. I did not hasten to try any of the metallic medicines, because I conceived her complaint to depend, either upon some organic disease within her stomach, or upon some spasmodic affection of that organ; and I did not imagine, Vol. VI.

that, on the former supposition, any of the metallic medicines could be of material service; whilst, on the latter, I wished first to give a fair trial to the bismuth, a supply of which I expected to be able to procure in a few days.

On the 30th, the fymptoms continued as before, but she said the mixture gave her a momentary ease, and could sit on her stomach longer than any thing else. The same medicine was ordered to be repeated, and some of the pilulæ aloes cum myrrba were directed to be taken occasionally.

On the 2d of August, there was little or no change in the symptoms. Some drops, confishing of zether, tincture of bark and vitriolic acid, were added to the former medicines.

On the 17th, she complained of not deriving any sensible benefit from her medicines; she then looked thinner than when I had seen her first, but not so much as might have been expected from the nature of her complaint: yet her general character and appearance, and still more so, her perseverance, and the regularity with which she came for advice, at stated periods, from a great distance, distance, did not permit me to suspect any deceit or mifrepresentation in the account which she gave of her complaint. On that day, I ordered five grains of the oxyd of bismuth, with fifteen grains of the pulv. tragacanth. compos. to be taken three times a-day.

On the 24th she came to me with an uncommonly animated countenance, faying she was almost quite well; but she begged I would let her have some more of those powders that had produced fuch remarkably good effects; to which request I most readily consented.

On the 31st she said she was quite free from complaint, but still requested I would allow her to take the powders a few days longer, as she was afraid of a relapse if she should leave them off all at once. She accordingly continued to take two of these powders a-day, for about a week longer; when finding herself perfectly free from complaint, she discontinued all kinds of medicines.

Since that time I did not hear any more of this woman, until about the middle of November last, when she called upon me, not to complain of a relapse, as I first apprehended, but to thank me again for the bleffing M 2 of of health to which she had been so happily restored. She said, however, that although she was in general quite free from her complaint, yet if any thing fretted ber, and particularly if her children gave her any uneasiness, she felt, occasionally, some slight sensation of it.

### CASE II.

Mary Wootfild, a girl seventeen years of age, presented herself to the dispensary for relief, on the 30th of July. She laboured under a chlorosis, the most distressing symptom of which was a violent pain in the region of her stomach. Some pillulæ aloes cum myrrba were ordered with a bitter insusion.

On the 3d of August, there being no favourable change whatever, some pills of vitriolated iron, with extract of gentian, were added to the former medicines.

On the 7th, the symptoms of gastrodynia being rather increased, 20 grains of the mixed powder of bismuth and tragacanth, (which I shall now call compound powder of bismuth,) were, as in the former case, ordered to be taken three times a-day; and she was directed to leave off all other medicines.

On the 10th, she was a good deal better, though not quite free from uneasiness in her stomach. The same powders were increased to the dose of half a drachm, three times a day.

On the 13th, she had still some remains of pain in her stomach, and complained of some other dyspeptic symptoms. The bismuth was continued, and a bitter infusion, with a few drops of aqua ammoniæ, were directed to be taken, twice a-day.

On the 17th, she was a great deal better, and the dose of the powders was reduced to 20 grains, three times a-day.

On the 20th, she was very nearly free from complaint, and the powders, and bitter infusion, were ordered to be continued.

On the 31st, she was quite free from complaint, and discontinued taking any medicines.

## CASE III.

Catherine Goffee, a woman twenty-two years of age, was admitted as a patient to the dispensary for a very severe pain in the pit of her stomach. This pain was constant, although not uniform, in violence. She had no sever nor cough, but her sace was somewhat slush-

ed. Her catamenia and other functions were regular; her tongue was clean, and her general health appeared very little affected. The compound powder of bismuth was ordered in doses of 20 grains, three times a-day.

On the 29th, she seemed nearly in the same state, and thought the powder rather increased the pain. She was, however, prevailed upon to take six more of them; but at the same time she was directed to take some drops of æther, and spiritus ammoniæ sætidus, when the pain should prove particularly troublesome.

On the 2d of November, her complaint was not in the least abated; on the contrary her pulse was a little feverish, her skin dry, and face slushed. I then abandoned entirely my former plan; instead of which I ordered a blister to be applied to her chest, with a sudorisic medicine. About a week after this she returned thanks, being perfectly cured of her complaint.

# CASE IV.

On the 14th of August, M. H. a single woman twenty years of age, became my patient in the dispensary. She laboured under

an extremely obscure and complicated disorder, for which, I am forry to say, she is still under my care with very little hope of recovery \*. I shall not at present trouble the Society with the particulars of this case, but shall only mention that the leading fymptoms were then, and are now still, a constant and most agonizing pain in the pit of her stomach and between her shoulders, without any fever, cough, or other fymptoms of phthisis pulmonalis. After trying a great variety of medicines without effect, I ventured, on the 4th of September, to give her the bismuth in the usual dose of five grains of the oxyd, three times a-day. She took it for three days, without any relief whatever; after which I did not think proper to push this trial any farther. Since that time, some slight and very transient symptoms of dropsy have occasionally appeared, and some vague suspicion has been entertained of a disease in the liver. 1 have repeatedly requested upon this case the advice of my much respected colleague Dr. Walker,

<sup>\*</sup> This patient recovered at last, under a gentle, but long continued course of mercurial medicines.

and I may fay, there hardly remains now any important medicine that we have not tried, all of them without any success whatever. I mention these circumstances merely to shew that the failure of bismuth in this instance can hardly be brought as an evidence against its esseate in spasmodic affections of the stomach.

# CASE V.

On the 8th of October last, Daniel Lee, a mason, fifty years of age, applied to me for relief. He complained of being seized every day, about two o'clock after dinner, with a most painful sensation in his præcordia, attended with sickness, great giddiness, but not vomiting. This lasted about four or five hours, after which it gradually subsided. During the fit, he could hardly stand, and was obliged to leave off his work. He was very thin and pale, and looked a great deal older. than he said he was. He had been subject, more or less, to this complaint for some years past, but for the six preceding weeks, it had been more constant and more severe than ever before. He seemed to enjoy tolerably good health in other respects. He had applied repeatedly for medical advice, and after taking a variety

a variety of medicines had been told, that nothing but time and nature could cure his complaint. I directed him to take 20 grains of the compound powder of bismuth, three times a day.

On the 11th, he had taken fix powders, and the violence of the fits was already abated.

On the 14th, he had taken twelve powders, and the fits were much less severe, and returned only every other day.

In a few days after this, after having taken in all, about two dozen of the powders, he returned thanks being perfectly cured; and I have just heard that he has continued, to this day, entirely free from complaint.

## CASE VI.

A fervant maid in my family, twenty-three years of age, who had, for some time past, laboured under amenorrhæa, was subject, amongst other unpleasant symptoms, to a violent pain in her stomach, which seized her every morning about eleven o'clock, and sometimes continued in the afternoon; but in general, it was considerably relieved by taking some food. She had taken large quantities

of ferrum vitriolatum, and other tonics, without any relief of this symptom; when, on the
8th of November, I directed 20 grains of
the compound powder of bismuth to be taken,
three times a-day. On the second day after
this, she had but a very slight return of the
pain, and on the third, she was totally free
from it. A week after this the catamenia returned, and she has been free from complaint
ever since.

If it be permitted to draw any inference from so small a number of trials, it would appear that the oxyd of bismuth is a remarkably fuccessful medicine in spasmodic affections of the stomach; for in four cases out of six, in which it was tried, a complete cure was almost immediately obtained; and in the two instances in which it has failed, the affection, which was at first suspected to depend upon a spasm of the stomach, has since appeared to be of a complicated, and probably, of a very different nature. I hope that I shall be able to lay before the Society the results of further trials; but in the mean time I have thought it proper not to delay this communication, as it may be the means of increasing

the number of observations \*: and although this medicine has not hitherto appeared to be of much service in other complaints, it ought not to be rejected without a fair trial, on account of its limited effects; especially as daily experience shews that those medicines, which have been so much extolled at first for their universal virtues, generally prove in the end less useful than those which have first attracted notice by their efficacy in relieving only some particular symptom.

Some cautions (as Dr. Odier has pointed out in his note) are required for the accurate washing and purifying of the white oxyd of bismuth; and, simple as it is, this preparation is tedious, and requires considerable attention. Mestrs. Allen and Howard, of Lombard street, have been so obliging as to prepare, at my request, a very pure specimen of this me-

dicine.

<sup>\*</sup> Since the above paper was read before the Society, I have had frequent opportunities, at Guy's Hospital, of trying the oxyd of bismuth in spasmodic affections of the stomach, and those trials have fully confirmed the opinion which I offered three years ago, on the utility of this medicine. It has also been tried by some of my medical friends, and amongst others by Mr. Charles Aikin, who have formed a favourable opinion of its effects.

dicine. In this state, the oxyd of bismuth appears in the form of an almost impalpable powder, of a beautiful white colour. I generally mix it with some of the pulvis tragacanth. comp., chiefly with a view to suspend it in a watery vehicle; but magnesia and sugar, or any mucilage, would, I suppose, answer the same purpose; and the oxyd alone might probably with equal propriety be given in the form of pills. The impure oxyd of bismuth being fold in the shops under the name of Magistery of Bismuth, I should propose to call that preparation, which is to be used as a medicine, Oxydum Bismuthi album; or if it be thought too great an annovation to use a nomenclature which, although universally adopted in chemistry, has not yet been generally adapted to pharmaceutical language, I should call it, according to the analogy of the London Pharmacopæia, Calx Bismuthi alba.—The name, in this particular instance, may be of fome importance, as the impure oxyd fold in the shops for cosmetic purposes, may often be mixed with nickel, cobalt, and perhaps also, with lead or other impurities. It has even been suspected that common Magistery

of Bismuth rubbed on the skin could injure the constitution; but it is a mere conjecture, and I believe the chief and real objection against its external use, is that certain odorous sumes or gases, and particularly the sulphurated hydrogen gas, turn it black or brown on the skin itself.

In recommending this medicine to the attention of the Society, I should be forry if I was supposed to rely implicitly, either upon the trials made at Geneva, or upon those which I have made myself. I am perfectly aware that nothing but time, and a very general experience, ought to establish the utility of any new medicine: but at the same time the sear of innovation ought not to be carried too sar, and I hope in this particular instance, the safety of former trials, and the previous approbation of a few respectable practitioners, will appear sufficient grounds to intitle this medicine to a candid examination.

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## ARTICLE XVIII.

On the Use of the Bath Waters in Ischias, or the diseases of the Hip-Joint, commonly called a Hip-Case.

By W. FALCONER, M.D. F.R.S. &c.

Ηδε νυσος χαλεπη λιην εςι και χρονιη.

Hipp. de Internis Affectionibus.

THE complaint of the hip-joint, commonly called a hip-case, has (in modern times especially) been much overlooked in the enumeration of diseases.

It has, under the appellation of sciatica, been confounded with rheumatism and gout, and also with psoadic abcess; from all which it differs materially, both in its nature, seat, and method of cure.

I shall endeavour, first, to give some account of the appearance of this complaint, and of its attendant symptoms, and proceed to speak of its causes, and the method of cure,

and

and conclude with some remarks on what other writers have delivered on the same subject.

Few practitioners have feen this difease at its commencement. Its symptoms are usually inconsiderable and transient, sometimes disregarded, and at others considered only as the consequence of some casual strain or over-exertion, or of too long continued exercise; and, if the person affected be in middle life, or farther advanced, it is mistaken for a gouty attack. It is certainly true, that all these causes may produce symptoms nearly resembling those hereafter described, however different the nature of the several complaints may be.

In the state wherein persons labouring under this disease, come to Bath for relief, the seat of the pain is generally described to be, rather behind the great trochanter of the thigh bone, and nearly on the same level. The persons affected speak of it, as being, to their sensations, deep-seated, but still capable of being aggravated by moderate pressure with the singer on the part where the pain is selt. No external soreness of the skin is observed.

735 T

The glutæus magnus, and the vastus externus muscles generally appear wasted and slabby, and the external line of division between the glutæus and the biceps, and semitendinosus seems in a good measure obliterated, and filled up with a slabby protuberance, as if the glutæus magnus was let down, or spread over the upper part of the muscles which lie immediately below it. Notwithstanding this apparent enlargement, the circumference of the thigh is, in reality, diminished; which diminution in large subjects, I have seen amount to three or four inches, when compared with the side not affected

Sometimes the breadth of the nates on the diseased side, is much increased, though its prominence and simmess are diminished; a man now \* in the Bath hospital, has the nates on the left side, at least three inches wider than on the right. The head and neck of the thigh-bone itself may be discerned, by feeling, to be much more prominent on the affected side; and the joint suffers, I believe, a partial dislocation.

<sup>\*</sup> August 27, 1801.

The tubercle, or lower part of the ischium, may, in many instances, (but not always,) be discovered, by feeling it behind, to be lower on the affected side than on the other. A man now in the hospital is a remarkable instance of this difference between the height of the bones on each fide; and a pelvis of a person who died at the same place, and was preserved there many years, shewed it still more strongly. The leg on the side affected is fometimes shorter, though it is more frequently longer than on the other. Sometimes the difference is but little; but, I believe always perceivable. A man, now in the hospital, has the left leg, which is the side affected, at least two inches and a half longer than the right. It often happens that the leg, which had been at first elongated, becomes, in the course of the disease, shorter than the other; but I have seen unquestionable instances, in private practice, as well as in the hospital, wherein the affected limb was shortened, without any previous elongation. Motion of the limb is, I believe, always painful, although not in any violent degree, unless in the advanced stages of the disease; but Vol. VI. I have I have observed, in several instances, that the patients could describe a circle with their toe, with as much ease as they could advance the foot forwards.

In general, they find it difficult to extend the legs, sideways, far from each other, though sometimes the contrary is the case. It is, I believe, universally true, that they are unable to support any considerable proportion of the weight of the body on the affected side; or to stand alternately on the legs, as is usually done by persons in health.

The pain is not confined to the spot nearest to, or lying over the real seat of the disease; but seems to be propagated downwards, in the course of the vastus externus, to the knee, and along the peroneus anticus to the outer ancle. Sometimes the pain of the knee has been so violent as to cause that joint to be mistaken for the seat of the malady, when the hip-joint only was affected \*.

It

<sup>\*</sup> There is a considerable analogy between the effects of a carious or inflamed tooth, and those of a similar event taking place in the hip joint. The pain is, in both instances, dissuled to a considerable distance from the seat of the disease; the tooth is raised from the socket, analo

It is not uncommon for the feat of the pain to be on the upper part of the pectineus muscle \*, near to the spot where psoadic abscets often appear; and, in such cases, the pain descends on the inside of the thigh, nearly in the direction of the adductores of the triceps, the vastus internus, and in a straight direction from the knee downwards to the internal ancle.—In the general state of the disease as above described, I have mostly found the pulse regular, and of the natural standard, in point of quickness, the skin cool, and the evacuations as usual in

analogous to the lengthening of the limb in hip-cases; and when the pain and inflammation subside, the tooth sinks lower into the socket than it was originally. This is analogous to the shortening of the limb after a previous elongation. The thickening of the membrane lining the socket of the tooth, which is caused by the inflammation, raises the tooth upwards; and the wasting or decay of the same membrane afterwards, allows the tooth to sink deeper into the socket, than it did when in its natural situation.

<sup>\*</sup> In a case now in the hospital, the pain began on the outer part of the hip, near the great trochanter, and almost entirely removed from thence into the groin, where it remains at present.

health; and indeed very little change in the general fystem. But when the disease advances, and the part' affected becomes fore and tender to a flight touch, and the pain grows acute, throbbing, and uninterrupted; when the swelling increases, and the skin of the pained part changes to a red or pink colour, with an appearance of flight erysipetalous inflammation, the pulse then is accelerated confiderably, the face changes alternately from a lead-coloured paleness to flushing, and the contrary \*; the skin is mostly covered with a clammy fweat, the tongue grows white, the flesh wastes, the strength declines, and the fituation of the fick person becomes, in a good measure, similar to that of one in the advanced state of a pulmonary consumption. As the Bath waters are confessedly prejudicial in every situation accompanied with hectic fever, we feldom witness the last stage of this disease, such persons being usually sent

home

<sup>\*</sup> I have been informed by Mr. Phillot, surgeon to the hospital, a gentleman whose judgment, as well as long experience intitle his observations to the highest regard, that he has remarked startings and catchings during sleep to be, in this stage of the disease, some of the most certain signs of the formation of matter.

home as incapable of receiving benefit from this remedy. Sometimes indeed we have been necessitated to retain such distressed objects, until the termination of their miseries; as when they have, through the indifcretion, ignorance, or unfeelingness of those to whose care they were intrusted, been sent hither in the last stage of the disease, and were too weak to be fent back. An abscess, in such persons, has been usually formed on the outside of the thigh, near the seat of the pain; and has either burst of itself, or been opened, and the patient either funk prefently under the excess of the discharge, or continued to linger some time in the same state with those who die tabid, as it is called, from long continued, and excessive suppuratory evacuations. Every case however, where suppuration takes place, does not prove fatal. Some escape, and I have been informed, that they have principally been those, wherein the abscess has been suffered to burst of itself, in preference to its being opened with the knife.

If the quantity of matter be not very large, and the hectic fever abates on the discharge of it, there are hopes that attention and professional assistance may prove successful.

But

But the advice of an eminent furgeon \*, when speaking of the empyema psoadicum is here in a good measure applicable, "that the "instances of those who perfectly recover are "so few, when compared with those to whom it proves fatal, that it will never be prudent to make a favourable prognostic."

In such cases, where the patient escapes with life, an anchylosis, or great rigidity of the joint, often, takes place, or at least a considerable shortening of the limb; which last indeed, is often the consequence of the disease, under circumstances much more favourable.

Hectical symptoms, though they cannot but suggest a doubtful prognostic of success, are not always indications of impending suppuration. If proper management be used, and timely applications made, this disposition may often be checked. Even when there are the strongest reasons to believe that a sluid has been essufed into the sheaths of the muscles, it has been found possible to cause it to be reabsorbed, without coming to suppuration, or without its being again deposited on some other part, or producing any other bad con-

sequences.

<sup>\*</sup> Mr. Pearson of the Lock Hospital.

sequences. But matter, when completely formed, is, I believe, never taken up again, without producing some mischievous effects.

Some writers speak of the shortening of the limb as a mark of suppuration being formed. A sudden change from elongation to abbreviation may perhaps indicate, or rather afford a presumption of this kind. But this event will be manifested by many other symptoms at least equally decisive. The mere abbreviation of the limb often takes place early in the disease, and long before the commencement of the feverish fymptoms; and may be fatisfactorily accounted for without supposing it to arise from the formation of matter. This disease is sometimes acute and rapid in its progress, and at others flow and chronical. I have feveral times feen it come to an alarming height in a few weeks\*, and in other instances to continue several years without much perceptible abatement or aggravation.

In one person, two years elapsed after the beginning of the pain and lameness, before

<sup>\*</sup> A man now in the hospital is an instance of this,

any perceptible alteration in the length of the limb took place. After that interval, the leg began to lengthen, and advanced so as to be nearly three inches longer than the other; in which state it still continues, (Sept. 24, 1801,) at the interval of full two years from the time it was first observed to become longer. During the above long period of the complaint he has suffered no symptoms of fever, nor manifested any signs of suppuration.

In cases that terminate in death, anatomical examination obviously points out the nature of the disease. The head of the thighbone, and even the neck, is generally found carious; and the acetabulum, and sometimes part of the bones of the pelvis surrounding it, corroded, and sometimes in such a manner, as to open a passage internally into the cavity of the pelvis. Matter is often found in the cotyloid cavity itself, and in such a quantity as could scarcely be supposed to be lodged there; and it is said, without any marks of inflammation in the parts about it. To these appearances however, I never have been an eye-witness.

The symptoms that occur at the first coming on of the disease, are so inconsiderable, and their advance so gradual, that it is difficult to recount them accurately. A fense of weariness and weight on the affected side are usually mentioned as the first marks of indifposition. This is followed by pain \*, slight at first, but which increases gradually. difficulty of stooping forward succeeds, so that the patients feel much uneafiness when drawing on their stockings, and are often obliged to put them on by bending the leg backwards, and placing the hand behind the body.

Stiffness of the joint, and an aggravation of the pain on motion, foon follow, and, in fome persons, a difficulty of separating the

<sup>\*</sup> A man now in the hospital, who came in August 27, 1801, informed me that his first symptom was a violent pain in the right hip behind the great trochanter, which attacked him after lying on the ground when he had been working in the hay harvest, on July 14th next preceding. This pain continued some time in that situation, and removed in a great measure from thence into his groin, where it is at present. Some little uneasiness still remains in the hip where it first began, but very inconfiderable, compared with what it was at its commencement.

legs fideways; and in fome, though more rarely, an equal difficulty in bringing the legs together. In the former case, it has been found necessary, at the hospital, to provide cushions, to prevent the knees gailing one another; and in the latter, a band or belt inclosing both the knees, to guard against a strain, by too great a lateral separation of the legs from one another.

It is perhaps, not difficult to account for feveral of the above, feemingly contradictory, fymptoms, without supposing any real difference in the nature of the disease.

The thigh-bone stands in nearly the same direction with the trunk of the body, only a little obliquely, in such a manner that the upper parts of the bones are at a greater distance from each other than the lower. The neck of the thigh-bone is a protuberance, situated rather interiorly at the upper end of the bone, inclining upward, and a little forward, and making an angle with a right line drawn through the center of the thigh-bone, of about 48 or 50 degrees, but in some subjects, the direction of the neck is almost transverse, or at right angles with the trunk of the body.

The head of the bone contains about twothirds of a sphere, not indeed accurately so, but sufficiently inclining to that figure to explain several circumstances that take place in this disease. The largest part of the convexity of the head of the bone, lies in the back part of the acetabulum.

I have already observed that a partial dislocation of the limb takes place, when it either shortens or lengthens; and I think it clear that this alteration of the length depends on the part of the head of the thigh-bone, or of the acetabulum which shall be affected. We cannot doubt that the first appearance of this disease is in form of inflammation of the part, which is the feat of the complaint. The pain, difficulty of motion, and in bad cases, the subsequent suppuration, indicate this decifively. The effect of inflammation on the cartilage, or membrane covering the head of the joint, and on that lining the focket, is to thicken it in the parts so affected. If then, the inflammation affects either the lower part of the head of the bone, or of the acetabulum, it will raise the head of the bone, and at the same time partially dislocate it, and thereby shorten the limb, and cause a projection

jection of the head of the bone. If the cartilage, or periosteum, be thickened in the superior parts, it will thrust the head of the bone downwards, and lengthen the limb. If the difease be seated at the bottom, or the back part of the cotyloid cavity, or in the finovial glands, it will thrust the bone outwards, without much affecting its length. A man, now in the hospital, has the nates on the left side extended laterally nearly one-third farther than on the right, by the projection of the head of the thigh-bone. If the construction of the neck of the os femoris be to go off nearly at right angles to the trunk of the body, the apparent projection will be greater in proportion.

I observed however, in the instance above mentioned, that the glutæus muscle was not let down, but preserved the usual marks of separation from the muscles of the thigh.

It was noticed above, that the os ischium, on the affected side, was sometimes, but not always, lower than on the other.—I have seen this take place, both when the leg on the affected side was longer than the other, and also when it was shorter. It proceeds, I think, from the pendulous state of the affected limb, which,

which, whether it be lengthened or shortened, cannot bear its part in the support of the body, but hangs a dead weight on the affected side; and probably drags the parts, with which it is connected, downwards along with it.

When the feat of the pain is fituated in the groin, it is not eafy, at first sight, to distinguish a hip-case from the beginning of a ploadic abscess; and indeed some cases of the latter kind have been sent to the Bath hospital, supposing them to be hip-cases. They may however I think be distinguished, by observing that the pain in the groin in ploadic abscess, though it extends to the apper part of the thigh, and sometimes a considerable way down it, does not shoot downwards to the knee, and from thence to the ancle as in hip-cases.

In psoadic abscess, there is no actual abbreviation or elongation of the limb, though there is sometimes a contraction of the knee joints.—The thigh-bone does not project in psoadic abscess, nor are the nates larger on the affected side, nor is the glutæus let down over the muscles below it.

### CAUSE.

As this disease is often owing to carelessness, imprudence, or accident, some account of the causes that are most liable to produce it, may not be without its use.

The permanent application of cold to the part is the most common assignable cause.

On this account, and indeed for other reafons, hip-cases are more frequent among the lower ranks, and among labouring people; though the higher ranks are by no means exempt.

I have known it originate from damp beds, from working in water, or indeed in wet grounds, or being much exposed to wet casually, as among washer-women and brewers' fervants, and others liable to have their clothes often wet.

But lying on the damp ground, especially when the body is heated, is the most common, and, as I think, the most powerful cause.

Labourers in harvest are particularly liable to hazards of this kind from their lying down, and frequently sleeping, under trees, and on the damp ground, when the body is heated with labour, and exhausted with fatigue. A

very considerable portion of the persons in the table subjoined, owed their complaints to this dangerous indulgence, from which no caution, no intreaty, can divert them, though they are generally as sensible of the danger, as those who suggest the warning not to incur it. But a presumptuous spirit to shew what they esteem a mark of courage, prompts them to incur hazard without any obligation of duty, when if any real demand for such a service had been made, they would have complained of being required to run so great a risk.

I was some time in doubt if the exhalation from the moist earth might not tend to produce this disease by means of its specific qualities, independent of the successive generation of cold which is produced by constant evaporation. But I am inclined to think that it did not proceed from any specific quality of the moisture exhaled, but from the cold only; as I have seen the disease produced by sitting at an open window, where no exhalation of any kind could be supposed to have any effect.

Blows and falls are also accounted among the causes of this disease; and it is certain that such accidents may, and often do produce it.

Over-

Over-exercise and strains have the same effect. But none of these causes make any alteration, as far as I know, in the nature of the complaint.

### METHOD OF CURE.

As those who resort to the Bath for relief in hip-cases, do it with a view to the trial of a local remedy, our principal intention must be, to put them into such a situation as will enable them to receive such benefit, as the remedy is capable of affording.

It should be observed that the external application of the waters, is alone employed, their qualities, internally taken, being too heating to be compatible with the purpose aimed at.

As fever and inflammation are most adverse to the general intentions of cure, and to the use of this particular remedy, every precaution is taken to prevent, or to check them.

It fortunately happens that, in most instances, the pulse is little, or not at all accelerated, though the pain and other symptoms
are very distressful. Under such circumstances, after the exhibition of a gentle purgative, it is usual to enter on a course of bath-

ing. If the patients be tolerably strong, and the fymptoms moderate, they are directed to bathe in the hot-bath, which is the one specially appropriated for the use of the hospital patients, and is about 105 degrees of heat. The usual time for continuing in the bath is from 15 to 25 minutes, and it is generally repeated twice or thrice a week. After a few times bathing, the dry-pump as it is quaintly called, or pumping the affected part without bathing, is advised, and this is tried on the part affected, on those days when the patient does not bathe, Sundays excepted. From 50 to 200 strokes of the pump are usually given, the latter of which numbers takes up about five minutes of time.

The first good effects of this application are to abate the stiffness and pain of the joint, and to afford a greater latitude and extent of motion. This is often perceived after using it three or four times. As the effects of the remedy proceed, the soreness and swelling diminish, the nocturnal pain, which is often very distressing, abates, the power of supporting the body on the lower limbs, on the affected side, increases, the legs, whether shorter or longer, approach towards their proper divol. VI.

mensions, and the muscles, that were let down and wasted, regain their natural shape, firmness, and plumpness.

If the use of the waters succeeds as favourably as is above described, we seldom interfere farther, and have frequently the satisfaction to see a perfect cure performed by them, and sometimes in cases which, at the commencement of the trial of the remedy, did not appear very promising.

It happens, not unfrequently, that the waters will shew their beneficial effects to a considerable extent for some time, and then the amendment seems to be at a stand; but still without any accession of new morbid symptoms, or without any aggravation of the old. In such cases we find it requisite to suspend the use of the waters for some time, and to apply a blister upon the seat of the pain; after the healing of which, we often find the application of the waters may be repeated with advantage. -- But the state and condition of the patient does not always allow us to pursue such an easy course of practice as is just described. It sometimes happens, that the irritability of the patient's nerves is so much excited by the use of the bath, as to render 13

render much caution necessary in the trial, especially in semales.—Sometimes it causes violent perspiration, and much reserve is necessary on that account. In instances of the latter kind, unaccompanied with sever, a light insusance of the bark, with aromatics, is generally serviceable.

But the tendency to fever is most to be apprehended. If the spot where the uneasiness is felt, be externally fore, and tender to the touch, the swelling and pain considerable, and especially if the latter be much aggravated by flight motion, it is necessary to be on our guard, even though no acceleration of pulse has yet taken place. Cupping-glasses with fcarification, and even fometimes without it, are applied in fuch cases with advantage; or, if the skin be too fore or tender to endure, without much pain, the suction of a cupping-glass, a large number of leeches, sometimes as many as fifteen, have been substituted in the place of the other, and repeatedly applied, and have proved of great fervice.

In aid of these applications saline cooling purgatives, and the common saline draught, with antimonials, are administred with advantage.

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For the relief of the pain, which often subsuffice without sever, or at least without any that is indicated, either by the tongue or the pulse, we find it necessary to employ opiates. I have generally used Dover's powder with this intention, in the quantity of, from sive grains to a scruple, once or twice in twentyfour hours, and commonly with good effect.

If these means prove effectual (as they often do) to procure the abatement of the symptoms, the bath is cautiously tried, the Cross bath especially, which is cooler than the other, and that for a short time only, and directed to be conducted with as little fatigue and trouble to the patient as possible. If this can be borne without aggravating any of the symptoms, but rather with a foothing effect, it is directed to be repeated, after an interval of three or four days, repeating the purgative above-mentioned, occasionally. When the bath can be borne with ease, we recommend the use of the pump in the bath, in which the impetus of the water thrown on the part affected is less than in the dry pump \*, as the stream

<sup>\*</sup> It should however be noticed, that the construction of the dry-pump is such, as to admit, with great ease

stream is conducted to the part, beneath the surface of the water of the bath.

By these means, together with the assistance of a blister on the part, which I think succeeds best when the tendency to inflammation and sever has been somewhat abated by evacuations, we often render the application of the waters safe and effectual, in cases that seemed at first view not to allow their use. To reduce the swelling, and to promote a reabsorption of the essued fluid, when that can be safely done, (as I have found it sometimes

and convenience, the water to be thrown on any part, to which its application is defired, with a great latitude in the impulsive power. It flows through a long flexible leather tube, with a brass pipe at the end, and may be conducted to any part of the body, at any angle, and of course, with almost any mitigation of the impulse that may be required. It is well known that, the original impelling power being given, bodies strike one another with a proportion of this power, according to the fine of the angle at which they strike. Thus if we suppose the perpendicular force of a stream of water falling on a plane furface to be as 40, the same stream striking the same plane surface at an angle of 30 degrees, will act with a power of 20 only, the fine of 30 degrees being to the perpendicular, or to the whole fine, as 20 to 40, or as 1 to 2.

may,) I have directed a trial of the lime-poultice, composed of one part of quick-lime fallen to powder in the air, and two parts of oatmeal, and this made into a poultice with hogs-lard, and spread about one-half an inch thick on a cloth, and applied, temperately warm, to the part. This may be repeated every night, and removed in the morning, and continued an indefinite time. It generally produces some degree of moisture or exsudation under it, though without raising a blister, and this gradual local discharge is often an effectual, though gradual method of reducing tumours, both of the hip and of the knee. Vomits of turbith mineral have been fometimes given in incipient white-fwellings of the knee; I have feen them so administered, but without fuch proof, either of their efficacy, or of their safety, as to encourage a trial of them in hip-cases.

It happens indeed sometimes, either from the disease being too far advanced before the patients are sent, or from the tendency of the constitution to hectic sever, that suppuration will come on in spite of all our efforts to prevent it. Such cases being no longer sit subjects subjects for a trial of the waters, are generally sent home with as much attention as possible to their ease and comfort.

If weather, distance, or the violence of the disease will not admit of their removal, consistently with their present safety, or with proper attention to their sufferings, they remain at the hospital; and four instances of persons who paid the last debt to nature under such afflicting circumstances, are recorded in the following table, and probably a similar sate attended a large majority of those who were sent home with proof, or strong suspicion of matter being already formed.

TABLE of the State of the Patients at their Discharge, who were admitted into the Bath Hospital for Hip-cases, from May 1st, 1785 to April 7, 1801, classed according to their Ages.

Ages	Cured	Much	Better	No octter	linpro-	irre- gular	Dead	Total
Under 10 years		5	8	I	9			23
From 10 to 20	30	24	32	9	34		2	:31
From 20 to 30	20	48	28	13	34	2	1	146
From 30 to 40	22	29	18	2	24	3		98
From 40 to 50	21	30	15	7	16	3		92
From 50 to 60	8	25	6	I	5	2	2. one of the small-pex.	4
From 60 upwards	2	7	4			3	finall pox	17
Total	103	168	III	33	122	13	6	556

It is proper to apprize the reader that by cured, in the second column of the foregoing table, is meant such persons who have completely recovered from their complaint, and who have no symptoms of the disease remaining,

maining, for which they were admitted. By much better is understood such as have nearly recovered, but have still some stiffness, debility, or other mark of the disease remaining. This term, however, is never applied, unless to such as are nearly recovered, and never to crippled or helpless persons, however such may be circumstanced with regard to health.

By better we understand persons who have received obvious and material advantage, but who have nevertheless strong marks of the effects of the disease. This term, however, is never applied to such as, although they may have received some temporary alleviation of their sufferings, still labour under hectical or other symptoms, that indicate their health to be declining.

It is much to the credit of the Bath hofpital, that a great degree of candour has been
uninterruptedly preserved ever since its foundation, above 60 years ago, in representing the
state of the patients when dismissed. These,
when minuted to be discharged by the attending physician, are again produced before some
of the other professional persons, and examined as to the state they were in when admitted,

mitted, which is compared with their state when sexamined, and both these are compared with the report of their state by the attending physician. They are again produced before the committee, and separately and regularly examined as to the same points, and I have repeatedly witnessed the committee requesting the attendant physician, to alter the report, when it appeared to them that the amendment was more confiderable than it was put down in the report, but I never knew the smallest hint offered that the state of the patient was more favourably represented by the physician, than it seemed to merit, on the examination before the committee. In short it has been the invariable rule to err, if at all, rather on the fide of caution, than on the contrary extreme, and to represent such patients only to have received benefit in any degree, whose cases exhibited obvious and undeniable marks of amendment, not fuch as are merely probable, or any-wife equivocal.

It appears from the foregoing report of the state of the patients, that out of 556 persons admitted into the Bath hospital for hip-cases from May 1, 1785, to April 7, 1801—103,

or about 1. in 5.398 received a complete cure, that 168 or 1. in 3.03095 received great benefit, and were nearly recovered; that 111, or nearly one-fifth of the whole received some benefit, and that the aggregate of these three numbers, amounting in the whole to 382, or as 1. in 1.4555, or more than two-thirds received advantage from a trial of the remedy. Of the above numbers four only died in the hospital of the disease, a very inconsiderable proportion, 33 or nearly a 17th part of the whole were no better, 122 were deemed improper cases for a trial of the waters, and 13 were discharged for irregularity.

By those set down under the title improper are meant, in general, such whose cases were, on their first examination, or soon after it, thought to be improper subjects for a trial of the waters, as being in too advanced a stage of the disease, or from other circumstances of their health that forbad the use of the remedy; much the greatest part of whom ought not to have been sent hither at all. In 97 of these out of 122, matter was discovered to be formed, or forming, very soon after their arrival, which of course rendered a trial of

the waters inadmissible. These, therefore, should be struck out of the account, as proving nothing respecting the efficacy or inessi-cacy of the waters. The same, it is obvious, may be said of the 13, who were discharged for irregularity, and indeed of those who died, as four of these were, when sent, not in a condition to be removed with safety and propriety, and two died of the small-pox.—This takes off 141 from the list, and reduces the whole number, that should be considered on this occasion, to 415. The proportions then will stand thus.

Cured 1—in 4.1553 nearly.

Much Better \} 1—in 2.54, or nearly two-fifths

Better 1—in 3.74.

Proportion of those who received benesit to the whole number as—9 2048.—to 10. or above nine-tenths of the whole.

It is unnecessary to observe how much the foregoing calculations, which are taken from the register of the hospital, a most accurate and authentic medical record, are in favour of the essicacy of the Bath waters in hipcases, and it should be noticed that they plead strongly

strongly for a trial of them in the early stages of the disease. It is more than probable that a large proportion of the unsuccessful cases, amounting in the whole to 159, including those who were no better—improper—and those who died of the disease, would have received relief, had a timely application been made to this remedy.

Very few of those specified as improper were suffered to make any trial of the waters, and in 97 of them, as I have before observed, matter was discovered at their arrival, or soon after, and the hectical symptoms precluded all hopes from the use of the bath, and indeed left little from the trial of any other means.

It appears that the Bath waters applied in an early stage of the disease have been nearly equally successful at very different ages. Their good effects have been manifested as early as five years old, and as late as 70 years, and the proportion of those who received relief at 60 years old and upwards, was as large as in the early periods of life.

The average stay in the hospital, of the first thirty of the persons cured, is 105 days, of the same number of those who were discharged

charged much better 155 days, and of the same number of those who were discharged better 138 days nearly. The average of the stay of those who were benefited is nearly 133 days, or 19 weeks.

It appears that the Bath waters are more fuccessful in hip-cases at a warm time of the year than at a cold one, as is indeed the case with this remedy, when applied to other disorders.

Of 88 persons taken in order, who received benefit, and who were admitted in the months of April, May, June, and July, 25 were cured, 39 were much better, and 24 better.

Of 105 persons received in October, November, December, and January, 25 were cured, 41 were much better, and 38 better.

It is obvious that a larger proportion of those who were admitted in the spring and summer, and who had a prospect of a series of warm weather, received a greater degree of benefit than those who were admitted in the autumn and winter.

I have thus finished my remarks on the tables, and trust I have established the efficacy

of the Bath waters in this obstinate, painful, and dangerous disease.

They are undoubtedly very effectual, but much time is usually necessary to complete a cure; and indeed, it needs be no cause of surprise, that a disease should take up as many months in its cure, as in some instances it has lasted years before the remedy was applied. In very recent cases I have seen a few weeks complete a cure.

I shall next add a few remarks on the history of the disease, as described by former writers, and the indications of cure, which they recommend or suggest.

The disease of the hip-joint was not unnoticed by Hippocrates. In his treatise on \* internal disorders, there are several † chapters on this subject under the name of  $I\sigma\chi_{1225}$ .—He says that it sometimes happens from long exposure ‡ to the sun's heat, no improbable cause in a hot climate. It is described as accompanied with a difficulty of turning, or even

<sup>\*</sup> περι των εντος παθων.

<sup>+</sup> Cap. LIV. LV. LVI. LVII. LVIII.

<sup>†</sup> ην ελθη εν ηλιω πολυν χρονον. Hipp. ut supra. Cap. LIV.

of \* moving the hip-joint, on account of the pain and stiffness. The former of these is deficibed to be in the † back and loins, those parts especially, which are connected with the hips, and also in the knees. Sometimes the pain is in the ‡ groin, as well as in the hip, and when that is the case, it is aggravated by raising the body from an inclined to an erect posture, or on moving sideways. The pain he describes as acute, and accompanied with a sensation of heat. In some instances it is attended with convulsion || of the part, with rigor and other symptoms of sever. He observes that many become § lame from this disease, and that an anchylosis of the joint is

<sup>\*</sup> ο γας νοσεων ερεφεσθαι η κινεειν τα αρθρα ου δυναται υπο της εν αυτοισιν αλγηδονος και του ξυμπεπηγεναι τους δακ-Τυλους. Hipp. ut supra.

<sup>+</sup> αλγεει δε μαλιτα την οσφην και τους σπουδυλους τους εκ πλαγιών των ισχιών και τα γονατα.

<sup>‡</sup> ιςαται δε οδυνη εν τοισι βουβιυσι πλειςον χρο.ον αμα και τοισι ισχιοισιν οξείη και καυματωδής, κην τις αυτον ανίση η μετακινέη υπο της αλγηθουρς είμωζει οκοσον αν μεγισον δυναται.

<sup>¥</sup> ενιστε δε και σπασμος επιγινεται και ριγος και πυρετος. Cap. LIV.

<sup>§</sup> εκ ταυτης ουν την 105ου πολλοι χωλοι εγενοντα. Cap.

a common\* consequence. He adds that it is a complaint of plong duration, and difficult to cure. The above account of the disease, though incomplete, is, as far as it goes, perfectly correct and agreeable to modern observation. The spasm or convulsion of the part, though little noticed in modern accounts, is, when combined with sever, as it is here described, not an uncommon symptom, and usually indicatory of suppuration.

The method of cure, which he proposes, is more exceptionable on account of the articles, which made a part of the Materia Medica then in use, than it is on account of the indications which he directs to be pursued. He recommends a vegetable ‡ and milk diet, the repeated application of || fomentations, the use of purgatives, especially of purging clysters, the application of cupping vessels to the part affected, and the drawing blood from

Εν τουτω κλυξειν. C. LIV.

<sup>\*</sup> Ην δε ξυμφυή και τα αρθρ αξυμπαγη πασα αναγκη χωλου γενεσθαι του ανθρωπον. Cap. LVIII.

<sup>+</sup> Ηδε νουσος χαλεπή λίην εςι και χρονίη. Cap. LVIII.

<sup>‡</sup> Σιτω δε και μάζη χρεεσθω μαλθανη ατριπτω, C. LIV. και γαλακτοποσίην. C. LIV.

Πυριησαι και σικυην προσβαλλειν και φλεβοτομεεν τας εν τησιν ιγνυησι φλεβας. C. LVII.

the veins in the hams. To this he adds a recommendation to move the \* joint frequently, to prevent an anchylosis. In some cases he advises suppuratory discharge to be made from the pained part by † means of several deep sores or ulcers to be produced either by burning the part, with fungous substances, suffered to consume slowly on it, or by means of a hot iron, or actual cautery. The plan of cure here laid down, is in a great measure agreeable to modern practice. Low diet, local bleedings, purgatives, clysters and fomentations, are our principal resources at present, as much as they were 2,500 years ago. Issues, indeed, and suppuratory discharges where thought necessary, are made in a manner less painful and terrifying, but the purpose aimed at, is pursued by discharges of the fame kind.

Hippocrates, in the third section of the fifth Book of the Epidemics, relates a case

<sup>+</sup> Ην δε μη δυναται ιστασθαι, εν τη κλινη χεη περιφερείν ως πυκνοτατα—οκωταν εντος μη ξυμφυη ο χονδρος. C. LVII.

<sup>†</sup> Καυσαι αυτου τα μεν οςωδεα μυκησι τα έε σαρκωδεα σιδδηροισι, πολλας εσχαρας και βαθειας. C. LVI.

where the pain was situated in the groin, and also in the hip-joint, in both of which a suppuration was formed.

Purgatives and bleeding were tried, but in vain, and the patient died at last, of the weak-ness occasioned by the excess of the purulent discharge. This case appears to me to have been rather a psoadic abcess than a hip-case.

In the succeeding case, which is more decidedly of the ischiadic kind, Hippocrates appears to have been more successful.

He, however, remarks that in this instance the pain that extended down the leg was not violent, and no suppuration was formed, nor was the general health of the patient \* affected. Purgatives, bleedings, and cupping were the remedies employed, which proved effectual towards a cure.

In the fixth section of the Aphorisms of Hippocrates, there are two that refer to this disease, which I think have been mistaken by the translators, who have expressed themselves as if there was an entire dislocation of

<sup>\*</sup> Και ουκ εγενετο εμπυης, υγιης δε πολλω χρονω, Epid. V. §. 3.

the head of the bone, when the word\* implies no more than a projection, which is indeed, a partial diflocation. The meaning of Hippocrates is I think clear enough, that if the head of the thigh bone be at first considerably protruded, or, as he expresses it, " stands out," and again finks back (suddenly is I think implied) into the focket or acetabulum, it indicates a suppuration to have taken place, and this I take to be true, provided, as we may reasonably suppose, that Hippocrates meant, that there be no general amendment, or abatement of the fymptoms. The membranes which were at first thickened by inflammation, and which thrust the head of the bone outwards being melted down by suppuration, allow it to fall back again into the focket, from whence it had been pushed by the thickening of the periosteum, or of the lining of the cotyloid cavity. The succeeding aphorism implies no more, than that hipcases of long continuance accompanied with a projection of the head of the bone, are apt to induce lameness and wasting of the limb. unless a cautery be used.

Celsus

<sup>\*</sup> Exicarai—existat—stands out or projects—literally translated.

Celsus \* appears to have been acquainted with the disease, but has lest little concerning it.

He observes, that it is of the chronical kind, very painful and weakening, and in some instances mortal. He recommends first somentations, then warm cataplasms, and afterwards the application of cupping vessels, and of a † plaister of hot brine, a remedy, yet in use in some parts of our own country, for local pains. If these fail, he directs the use of the actual cautery, and that the ulcers it produces should be kept open a long time.

Cælius Aurelianus is more diffuse, both respecting the nature and description of the disease, and the means of cure.

He specifies ‡ cold as the principal cause, especially as produced by || lying on the ground, or digging in § moist earth, by such as are unaccustomed to work in that man-

<sup>\*</sup> L. IV. c. 22.

<sup>†</sup> Sale calido et humido utendum est. Cels. ut supr. cit.

<sup>‡</sup> Perfrictio profunda—frigoris susceptio.

I Terrena cubatio.

Insueta humi fossio.

blows, violent strains from exercise, or exertions to list † weights beyond the strength. He remarks, that it occurs at every time of life, but more commonly in middle age ‡, that it sometimes affects both sides, and calls it, when it appears in that form ||, Ischias duplex. He describes the symptoms to be, a sense of weight in § the part, and difficulty of motion, and in some a slight torpor ¶ and prickling sensation attended by a sense \*\* of heat, sever and restlessiness, accompanied by a pain striking through the middle of the †‡

- \* Aut casus vel repentinus percussus.
- + Ponderis levandi ex interioribus conatio.
- ‡ Fit præterea in omnibus ætatibus sed præcipue in mediis.
- There is a man at present in the Bath hospital, who is affected in this manner by working up to his middle in water, a cause which it is evident must operate on both sides alike.
- § Gravedine et difficili motu. Cœl. Aurel. morb. chron. Lib. V. Cap. I.
  - ¶ Levi torpore et formicatione.
- \*\* Quibusdam cum vehementi atque pungenti, atque fervido dolore.
- †† Usque ad mediam natem et superius ad inguen vel ad anealem perveniens, atque suram, dehinc etiam talum, et pedis summitatem.

nates, and from thence upwards towards the groin, and descending from thence through the calf of the leg, to the ancle and the soot. This is succeeded by a \* wasting of the leg and thigh from the nates downwards, attended with weakness, and sometimes with † a shortening, and at others with a lengthening of the whole limb. He describes the persons so affected as unable to begin ‡ to move without pain and difficulty, but these somewhat abate on continuing the motion. They are, however, often obliged to stop | suddenly in walking, and when they attempt to renew the motion, they find the same difficulty as at first. They are unable to set the § foot

- \* Cruris totius tenuitas fit, quam Græce atrophiam vocant, incipiens a clunibus.
- + Brevitate cruris, aut ultra naturam distensione suffecta.
- ‡ Initia motus impediantur fervore partium attestante, ac si perseverans servor suerit, motus facilior sit.
- | Tum rursus subsidunt vel intenti resistunt repente tanquam sucrant necdum grassu tentato.
- Ambulant quidam capitibus digitorum gradientes, alii extenti quidem sed sinuatis clunibus ut neque se pronos inclinare valeant, alii contracte atque conducte qui pejus omnibus habere noscuntur.

firm and flat on the ground, but are obliged to walk on tip-toe, sometimes with the legs extended, but with the nates pressed inwards so that they are unable to bend forward. Others have their legs drawn close together, which is esteemed among the worst symptoms.

He supposes the seat of the disease (and as I think rightly) to be in the \* periosteum or rather the cartilage, covering the head of the thigh bone, which, when the disease becomes aggravated †, generates matter and sanies, and forms abcesses. The above account is all that is material which I have been able to collect from this writer, and argues him to have been well acquainted with the nature and symptoms of this disease, and the indications of cure, which he lays down, appear to me to be sufficiently judicious, and indeed agreeable to modern practice.

<sup>\*</sup> Patitur autem principaliter membrana quæ ossa circumtegit quam Græce periosteon vocant.

<sup>†</sup> Denique augmento passionis, intercreatus humor et frequenti dolore corruptus in saniem transiens, partes aliquas collectionibus afficit.

N.B. All the passages quoted from this author are from L. V. C. 19

He directs the patient to be laid on a \* foft bed in a warm place, and to use abstination and rest. The part affected is ordered to be covered with soft wool moistened with warm sweet oil. He also recommends a vapour bath, and a somentation of the oily kind. Bleeding †, a spare diet and clysters, are also recommended, and the latter, not merely as evacuants, but as acting in the capacity of an internal somentation, gentle ‡ laxatives are prescribed, but strong purgatives forbidden. If the pain resists these remedies, he advises scarifications (probably with a view to cupping) of the part ||, and leeches, together with a somentation of sponges soaked

<sup>\*</sup> Facere faciamus ægrotantem mollioribus stramentis calido in loco adhibita, abstinentia et requie usque ad primam diatreton. Tunc lanis mollibus ac limpidis oleo calido dulci prætinctis dolentia loca contegenda adhibenda, etiam fomentatio juges ex oleo dulci calido item vaporationum commutatio.

<sup>†</sup> Phlebotomia tempore consueto.

<sup>‡</sup> Adhibenda injectio—quo pariter fota atque vaporata interiora laxamento consentiant.

Tentanda denique ac properanda sequentibus diebus facilitas ventris.

Adhibenda scarificatio. Hirudines etiam adhibendæ.

in \* warm water, probably to encourage the bleeding.

The actual cautery † is also recommended to be applied in such a manner, as to raise a superficial inflammation, but not to destroy the substance of the part to which it is applied. The sungous excrescences ‡ of trees are recommended for the same purpose to be placed on the part affected, and slowly consumed thereon. A cataplasm of mustard directed to raise a blister, or one of mustard, quick-lime and sulphur made up with oil and water ||, and in effect probably not very un-

- \* Tunc vaporatio spongiarum ex aqua calida.
- † Tunc cauteres longi atque igniti immittendi, qui quidem cutem tangere minime debent.
- ‡ Alii ligneos fungos inferius ac superius angustos formantes patientibus apponunt locis, quos summitate accensos sinunt concremari donec cinerescant et sponte decidant.
- A Sinapi admiscentes glebæ calcis æquis ponderibus ad sulphuris (partem et simul conterentes parvo oleo et aqua admista.

A bag of hot salt is advised much in the same way as directed by Celsus, as above cited. Oportet sacellum linteum implere sale torrido et apponere patientibus partibus.

like to the lime-poultice above described, but as it should seem more acrimonious.

Such is the basis of the practice recommended by this writer, which is selected from a farrago of strange frivolous additions, expressed in a dialect uncouth, and difficult to be comprehended, but still not so obscure as to prevent our discovering that the author was well acquainted with the appearance of the disease—with its nature—and with the objects proper to be pursued, in order towards its cure.

To come to modern times: it is somewhat extraordinary, that Boerhaave and his commentator Van Swieten, who paid so much respect to the ancient writers, and so frequently cite them, should have neglected the information they communicate, and have confounded this disease with rheumatism and sciatica, with which it has little or no connection, and from which it is clearly distinguished by the writers of antiquity. Van Swieten, appears to have borrowed most of his information on this subject from Columnius, who probably had often seen the complaint, but neither Boerhaave nor Van Swieten give any description of it, nor suggest any remeans

dies or indications of cure worth repeating in this place. M. De Haen, has left a Treatife of 38 pages de Morbo Coxario, but I can difcover little in it that can affift us either in diftinguishing, or in curing the disease. I even doubt if he was properly acquainted with it, as distinct from rheumatism and sciatica, and the effects of external violence. He never mentions cold among the causes, although the most common of any. He, however, remarks the partial dislocation \*, occasioned by the enlargement of the synovial gland at the bottom of the acetabulum, by which the head of the thigh bone was thrust upwards, and the limb shortened.

His method of cure is founded on a blind veneration for the writings of Hippocrates, whose opinions, though curious and far surpassing what might have been expected at such an early age, and under other disadvan-

<sup>\*</sup> Tumida admodum glandula in cavo acetabuli ut enput offis femoris intra illud excipi non posset.—Unde demum caput offis femoris ex cotula trudi cœptum crus
sensim brevius redditum, et integra sed extensa adhuc capsula idem caput offis ad superiorem cavi acetabulo marginem applicatum. De Haen de Morb. Coxar.

tages, it were abfurd to introduce to supersede modern experience and observation, which has added much to the history of the disease itself, and suggested means of relief more effectual, as well as more easy to the feelings of the patients, than the coarse and painful applications recommended by the older writers.

Mr. Sauvages seems to have had only a gross and indistinct idea respecting this complaint.

The species called the Ischias ex Abcessu, and the Ischias rheumatica, come the nearest to the one here under consideration, but the sormer is little more than an advanced stage of the disease, and the latter is errone-ously connected with rheumatism, and both of them are so impersectly described, as to make it doubtful if the author had any personal experience respecting it.

Dr. Cullen has not included Ischias among his genera or species morborum, but confounded it with rheumatism with which it has no connection.

Dr. Francis Home, professor of Materia Medica in the University of Edinburgh, has noticed this disease in his chemical experiments ments and histories, and has produced seven cases to prove the essicacy of the oleum terebinthinæ. I have no experience of the remedy, but am consident most of the cases sent to the Bath hospital would not admit of the trial of such a medicine without danger. It seems very doubtful to me if any of those he describes were properly ischiadic cases, except the two sirst, and even those are not decidly so.—According to his experience men are more subject to it then women, and this nearly in the proportion of sive to two. This coincides nearly with my own observation. Of 556 patients, 413 were men, and 143 women, which is nearly as 5 to 1.7312.

His next conclusion is altogether confuted by the foregoing table.

He says, "that it is a disease of advanced age, and that he does not recollect ever seeing one in this disease in the vigour of life." Unfortunately for this observation it happens, that of 556 patients, 375, or more than two-thirds, were from 10 years old to 40, an neterval that certainly includes the prime and vigour of life. The Doctor's experience in this complaint was too limited to warrant his

conclusion. The late Dr. Charleton, who was himself many years physician to the Bath hospital, and had frequent opportunities of seeing this complaint, has given (collaterally) a brief, but, as far as it goes, a very accurate, account of it, which is indeed the first I have seen which bears the marks of extensive perfonal experience.

The method of using the waters, which he recommends, is nearly the same with the one above-mentioned \*.

\* Dr. Charlton fays, that "Dr. Oliver justly remarks, that when the case is recent, and the patient young, our waters frequently affect a cure. To which he adds, that when the disease has been of long standing, they seldom do much service; and, if the parts are much inflamed, but particularly if matter is formed, the use of them is highly injurious. Recent cases in all diseases admit most easily of relief, but in the present, we need not despair from the long continuance of the disease, provided it has not advanced to the state of suppuration, and hectic fever. A man now in the hospital, is in a fair way of being relieved, though his complaint is of four years standing, and indeed most of them are from twelve months to two years duration.—It is not the long continuance of the disease, but the advanced stage of it, that renders the trial of the waters improper.

It appears from his account, that the number of hip-cases sent to the Bath hospital, in twelve years, namely, from May 1, 1761 to May 1, 1773, amounted to 296, of whom 192 were cured or benefited, two received no benefit, two died, one was discharged for irregularity, and ninety-nine were improper. The proportion of the persons benefited to the whole number admitted, is greater in the table I have exhibited above, than in Dr. Charleton's account.

Either of them, however, sufficiently prove the efficacy of the Bath water in relieving such cases.

Mr. Edward Ford, surgeon to the West-minster general dispensary, published, A.D. 1794, a work, intitled, "Observations on the Disease of the Hip-joint, &c."

This gentleman has given a good description of the disease, and has added several useful plates, particularly the first which shews the state of the muscles covering the nates, and those immediately below them, which afford some of the earliest and most decisive signs of the presence of the disease.

His indications of cure appear to me to be proper and judicious; I am however, inclined to think that he places too much dependance on the benefit to be derived from issues, and too little on the effects of the warm bath.

Had he considered Dr. Charleton's report of the proportion of those benefited by the warm bath, he would probably have ranked it higher in his estimation. I have thus finished what I mean to say on this subject. I have endeavoured to be as concise as posfible, confistent with a sufficient explanation of my meaning. I have candidly stated the facts that have fallen under my observation, having no temptation to make an empirical display of the advantages of the remedy, but merely wish to lay before the public, from evidence not to be questioned, such an account of its effects, as may affift those who are intrusted with the care of persons so affected, to form their own judgment on the probability of success in each individual case.

I cannot, however, conclude without earnestly recommending to those to whom the Vol. VI. Q testi-

testimonies above recited appear satisfactory, to make a trial of this remedy, in as early a stage of the disease as possible; since, if it be delayed to a late period, it will serve only to aggravate misery, and hasten dissolution.

## ARTICLE XIX.

Observations on the Position of Patients in the Operation for Lithotomy, with a Case.

By NATH. SMITH, M.D. &c.

Of Hanover, State of New Hampshire.

[Communicated in a Letter to Dr. LETTSOM.]

READ, JUNE 14, 1802.

Hanover, State of New Hampshire, Dec. 19, 1801.

SIR,

More than four years have elapsed since I had the honour to be elected corresponding member of the London Medical Society; and though I have not before made any communication to that Society, I hope my exertions have not been wholly lost.

On my return from England, a Medical Institution was established at Dartmouth College. We have delivered one course of

lectures

lectures annually, on the different branches of this science, illustrating the modern and most approved theory and practice.

Several cases of disease, worthy of some notice, have fallen under my observation.

Eight weeks ago, I performed the operation of lithotomy on a man 72 years of age; he had been afflicted for two years, with calculous fymptoms.—His limbs had also become so inflexible, by rheumatic affections, that his thighs could not be separated more than fix inches, nor his knees bent but very little; - and thus his lower limbs could only be brought to about a right angle with his body. Under all these embarrassing circumstances, he was determined on the operation; which I accordingly performed, and extracted forty-seven stones from his bladder.—I have herewith forwarded two, one of the largest, and one of the smallest fize. - On breaking them you will find a nucleus, as large as a small cherry-stone; and in this nucleus you will find another, about the measure of a small pin's head. Such is the structure of all I have examined.

The patient had no bad fymptoms after the operation; and is now almost entirely recovered.—One circumstance, in this case, perhaps, deserves more particular notice; by the inflexibility of his limbs, the patient could not be placed in the position recommended by Mr. Bell, for the operation of lithotomy.—We could only bring, as I observed, his lower extremities to nearly a right angle with his body; which were supported, in that situation, by an affistant, standing with one foot on each side the body, with his back toward the patient's head.

The patient was placed on a bed, properly raised, and so inclined that his hips were considerably higher than his head; his superior extremities being left entirely free.—In this situation, the business was conducted with the greatest ease and safety.

Two affistants, one on each side, were required to retract the skin and cellular substance as they were divided, this position not rendering the parts sufficiently tense to recede without such aid.—The gorget being fixed in the staff, the operation was finished with equal facility, as if the patient had been placed in the usual position.

After

After performing this operation, it occurred to me that authors have erred in establishing a general rule; that, in operations for the stone, the patient should be placed on a table, with his hands tied to his feet or ancles.—
This position must be painful, and I believe dangerous, especially to corpulent persons; it will compress the abdomen, and force the viscera, contained in that cavity, upon the superior part of the bladder; thus exposing them to be wounded by the gorget.

I believe, in some cases, it has deranged the bladder, and rendered it difficult for the forceps, when introduced, to seize the stone.— I once operated on a corpulent man; after pushing the gorget into the bladder, I introduced a straight pair of forceps; but could not, in repeated trials, touch the stone. Afterwards, by a large pair of curved forceps, I I found it towards the pubis, and extracted it with difficulty; the patient died. In this case, I apprehend, if the patient had been placed on an inclined plane, with his superior extremities free, the stone would have fallen back towards the spine; so that the straight forceps would have reached it.

Iknow

I know of no advantage in confining the hands of persons subjected to this operation, unless to prevent their resisting the operator; and this can only be necessary with very young subjects, in which cases, the usual situation is more tolerable.

Perhaps I am too precipitate in my conclusions; but I shall, in future, leave the hands of my patients at liberty, while under the operation of lithotomy.

> I am, very respectfully, Sir, Your most obedient and humble servant,

> > NATHAN SMITH.

# ARTICLE XX.

Case of a great Enlargement of the Scrotum.

By F. RIGBY BRODBELT, M.D. &c.

Of Spanish-Town, Jamaica.

READ, FEB. 24, 1800.

Thomas Rivers, æt. 50, a negroe, laboured under gonorrhæa some years ago, which occasioned strictures in the urethra. This latter affection was treated in the usual manner, by bougies, which so far relieved the complaint, that the patient was able to pass his urine in a pretty sull stream.

In this state he continued for eight years; at which period, four years from the present time, he received in riding a violent bruise on the right testicle, from the pummel of the saddle, which occasioned great inflammation and pain. These symptoms, although painful, gave way without producing any apparently alarming consequences, when twelve months

from

from the accident, tumefaction took place in perinæo, and was soon succeeded by abscess and sistula. From this period the scrotum began to enlarge, which it has daily continued to do; and although for some time past, the increase has not been so rapid as at first, yet it is even now sufficiently perceptible.

To the feel the swelling is in general softish, but there are some places which are much indurated. To appearance the tumor seems to be of the nature of steatoma; and its very great bulk affords an instance of an organ originally small being capable of great change by disease \*.

There are several apertures at which the urine escapes, and some of them are even situated at the most interior and superior part of the tumor; but for the most part, the urine passes by sistual, in the posterior and inferior part of the swelling.—The patient also discharges a small quantity by the natural passage.

<sup>\*</sup> On measuring the scrotum, I found that along the course of the raphe, from the anus to the inserior part of the penis, measured two seet ten inches.—In the transverse direction it measured three seet eight inches.—From one groin to the other, along the circumserence of the tumor, sour seet.

The left testicle can readily be discovered in situ, but the right, on which the injury was inslicted, cannot be felt.

Although the tumor has already rifen to a fize uncommonly large, it is for the most part indolent, and when pain is occasioned, it is chiefly in perinæo and in the loins, arising probably from the acrimony of the urine, and the weight of the tumor.

This inconvenience, however, is much remedied by a large suspensory bandage, which enables the poor man to move a little from one place to another.—The sunctions of the patient are natural, and any deviation from the most perfect health seems to arise more from his sedentary life, than from the complaint.

## REMARKS.

Although fistulæ in perinæo are very diftressing and tedious complaints, and seldom
produce much enlargement of the scrotum,
yet from the above related case, we have
reason to think that this uncommon appearance took its rise from the fistula in perinæo.
—It is not easy to account for this enlargement from the influence of the urine, as the
usual

usual effects of urine, deposited in cellular membrane, are well known.

But, as the swelling commenced as soon as the urine had infinuated itself into the cellular scrotum, we must suppose that in this patient, from some peculiarity of constitution, the urine, by inflaming the parts, caused it to put on this appearance, instead of producing a more serious termination, by gangrene.

In the West Indies, but particularly in Barbadoes, the negroes are much troubled with an enlargement of the scrotum, whether arising from an increase of the testis, or of the scrotum, I am ignorant, probably from both.—The hydrocele is also prevalent, and in this island, from a venereal cause, it is not uncommon to see the testicle and scrotum much enlarged, indurated, and ulcerated, putting on the appearance of cancer, which, however, gives way to a well directed course of mercury. Whether the disease of our patient had imbibed any of these peculiarities of a warm climate, or is to be esteemed an accidental occurrence, I cannot presume to determine.

April, 1797.

Since writing the above case the man returned home, and remained for some months nearly in the same situation; but I have been lately informed that he died a short time ago, the tumor having been attacked with gangrene in several places, probably at those apertures through which the urine escaped.

F. RIGBY BRODBELT.

Spanish-town, Jamaica, Jan. 1, 1798.

### ARTICLE XXI.

Two Cases of Diabetes, with Observations on the different States of this Disease.

By JOHN BOSTOCK, M.D.

Corresponding Member of the Society.

One of the Physicians to the LIVERPOOL Dispensary, &c.

READ, Nov. 14, 1804.

#### CASE I.

J. R. aged 30, of a delicate habit of body, and rather below the middle fize, had enjoyed good health until about fix months ago, when he began to experience great weakness, which encreased so much, that in a short time he was unable any longer to pursue his usual occupations. The only cause to which he can attribute his complaints is, that previous to their commencement he had worked unusually hard, had consequently sweated much, and in that state had drank very copiously of butter-milk and water. His first morbid symptoms

fymptoms were general weakness and great thirst, accompanied with a heat and dryness of the mouth; his appetite became, about the same time, unusually voracious; and soon after he perceived an increase in the quantity of his urine.

At present he principally complains of weakness and thirst; his appetite is greater than natural, and he has occasional uneasiness about the stomach. He has had, for the last few days, a diarrhæa attended with griping pains in the bowels. In the morning he expectorates a large quantity of a sweetish-tasted mucus, which is fometimes streaked with blood, but he imagines that the blood proceeds only from his gums. Although his thirst is so urgent, and he has a constant senfation of dryness in the fauces, yet his tongue is moist and peculiarly clean. The teeth feel fore, and the gums are spongy, and inclined to bleed. His skin is dry, and he appears never to perspire. In a morning he has frequent cramps in the calves of the legs. He is much emaciated, the muscular debility is considerable, and is rapidly increasing. temperature is uniformly below the standard

of health, varying from 92° to 94°. The pulse is regular and of the natural strength; the respiration is also natural.

The quantity of urine which he voided in the 24 hours was about 8 quarts; it was of a light primrose or straw colour; when viewed across the light it was slightly opake, and when agitated somewhat mucilaginous. Its odour was not in the least urinous; it reddened litmus. Its specific gravity varied from 1.026 to 1.041. When a quantity of it was kept in a temperature of about 60°, fermentation commenced in a few days, and in a week its furface was covered with a thick stratum of yeast. The clear fluid being then separated, it exhibited all the properties of a weak vinous liquor, and it remained for some months, without undergoing any farther change.

porated; a matter, in consistence and smell exactly resembling a thick syrup, was produced, which weighed 248 grains. The syrup being then exposed to the atmosphere, in a few days a number of solid particles were formed in it; these increased in size, until

until at length the whole was converted into a mass of a granulated texture, which in its external appearance was very similar to manna. When reduced to powder it exactly resembled a sine brown sugar. It shewed no tendency to deliquesce, nor did it experience any change after being exposed for many weeks to the atmosphere.

If we suppose an ounce of this patient's urine to weigh 550 grains, and that 8 quarts are evacuated in the 24 hours, the weight of the whole urine discharged during this period will be 140,800 grains. But the folid matter left by evaporation, amounted to i of the whole weight, therefore 15,644 grains, or about 321 ounces of solid matter are removed from the fystem in 24 hours. The average quantity of the urine in health is 40 ounces, which at 520 grains, per ounce, will in the whole make 20,800 grains. folid matter contained in healthy urine, may be estimated at i of its weight, this will give in the 24 hours 693 grains, or 112 drachms of folid matter. It appears therefore, that in the case of this patient, about 31 ounces of solid matter, were every day carried off by the urinary urinary discharge more than the quantity usually removed by this channel. By proceeding upon the same data we shall also find the amount of the sluid discharged by this patient very greatly to exceed the standard in health. If we estimate, as before, the weight of the whole at 140,800 grains, and the solid part at 15,644, we have the quantity of sluid equal to 125,156 grains. From the same method of calculation, we shall find the watery matter discharged in the usual state, to be 20,800 grains, which quantity being subtracted from the former, leaves an excess of 105,040 grains, equal to nearly 219 ounces.

Portions of the fresh urine of 840 grains, each, were respectively submitted to the action of the following re-agents; the substances were gradually added until a precipitate was no longer produced.

A. Potash.

F. Nitric Acid.

B. Ammoniac.

G. Infusion of Galls.

C. Lime Water.

H. Aq. Lyth. Acet.

D. Muriate of Barytes. I. Nitro-Mur. of Tin.

E. Acetate of Lead.

A. A precipitate, was produced in small quantity, and the odour of ammoniac was perceptible.

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B. The

- B. The fluid was rendered flightly opake, and after some time a small quantity of a precipitate was thrown down, which weighed about  $\frac{1}{4}$  of a grain.
- C. A precipitate was thrown down, which weighed about  $\frac{1}{3}$  of a grain.
- D. A precipitate was produced, in moderate quantity, which subsided rapidly; and when collected, weighed somewhat more than 3 grains.
- E. A milkiness was produced, and after some time a precipitate, which weighed about 4 grains.
- F. When the acid was first added, there appeared to be a little nitrous vapor disengaged; after some time a minute quantity of a brown precipitate fell down.
- G. At first no effect was produced, after some time a very inconsiderable precipitate was formed.
- H. The precipitate was very copious; 14 grains were collected, and a part adhered to the edges of the filter, which appeared as if coated with a varnish of gum. The precipitate, when dried, was an earthy-like substance, of a light brown colour.

I. A copious precipitate was produced, which flowly subsided. Part of it adhered to the filter; 6 grains were collected, which when dried, formed a reddish-brown, brittle, semitransparent substance:

By means of the fix first of the above reagents, the respective quantities of the different saline matters contained in urine, are ascertained; by comparing the above experiments with similar ones, made by Mr. Cruickshank \*, it will appear, that the different salts exist in the diabetic urine, now under confideration, nearly in the same proportion to each other, as in the healthy state of the sluid, but that they amount only to about i of the absolute quantity. My patient was, however, at this time discharging above 6 times the natural quantity of urine, fo that it would feem, that in this instance, twice as much of the different saline substances was evacuated, as in the healthy state.

The infusion of galls has been employed as a test of the quantity of jelly in the urine; the quantity, in my experiments, was so small as to render it difficult to ascertain the exact

<sup>\*</sup> Rollo on Diabetes, p. 442-5.

amount, but after making allowance for the great bulk of fluid discharged, it may be inferred that the jelly was not evacuated in more than the usual proportion.

The precipitate from healthy urine by goulard is very confiderable, it sometimes amounts to To part of the weight of the whole urine employed. It feems not only to precipitate the muriatic and phosphoric salts, but to unite with a great part, if not the whole, of the animal matter. I conceived this property to depend upon the power which goulard poffesses of coagulating and precipitating mucilage, and as I found that it does not exert any action upon fugar, even when mixed with mucilage, I had fome expectation of being able, by means of this re-agent, to obtain, in a separate state, the saccharine matter contained in diabetic urine. A quantity of the urine, in which goulard produced no farther precipitate, was filtered and flowly evaporated. A dry, friable extract, was left, which in confistence and texture confiderably resembled a fine brown sugar. This extract was speedily disfolved, without effervescence, in diluted nitric acid; when kept for some time at the boiling

heat,

heat, no nitrous gas was extricated, nor was there any oxalic acid produced by a careful evaporation. The heat being still farther increased, it was reduced to a black tenacious mass, which exhaled a nauseous, empyreumatic smell.

The precipitate itself was afterwards heated with diluted nitric acid. Upon the application of heat, the whole was dissolved, except a small quantity of a white powder; no nitrous gas was disengaged. Upon cooling, some white crystals, composed of the nitrate of lead, were formed, but no oxalic acid, was produced. It seemed, therefore, that by the action of goulard, the saccharine matter, previously contained in the urine, was decomposed, or at least was so far altered in its properties, as to be no longer capable of affording oxalic acid.

The nitro-muriate of tin is an active precipitant of jelly, but has no effect upon the folution of fugar in water. I therefore employed it with the fame intention, that the goulard had been previously used, expecting that it might separate the animal substances from the saccharine matter. A quantity of R 3 diabetic

diabetic urine, after the precipitate produced by the nitro-muriate of tin had been separated from it, was evaporated. A residuum was left, of the consistence of a thick syrup, which, in appearance, resembled that produced by the evaporation of the whole urine. A part of it being still farther heated, an acid vapor was disengaged, and the extract was converted into a dry, carbonaceous substance.

A quantity of the fyrup-like matter was heated with nitric acid; by a flow evaporation crystals were formed, of a flat lamellated texture, exactly resembling those produced by the union of nitric acid and urea. A portion of these being added to lime water, a precipitate was thrown down, in small quantity, thus proving that they contained oxalic acid, though it was evident, both from the appearance of the crystals, and from the quantity of the precipitate, that it composed only a very inconsiderable proportion of their bulk.

The precipitate produced from diabetic urine by the nitro-muriate of tin, was itself afterwards heated with diluted nitric acid. Upon the application of heat, the vapor of

the nitro-muriatic acid was disengaged, the substance assumed a white colour, but it remained, for the most part, undissolved. No crystallization was produced by the evaporation of the acid; but upon the addition of potash, a small quantity of a white powder was thrown down. The effect of the nitromuriate of tin upon the urine was somewhat similar to that of the goulard. The greatest part of the saccharine matter was either decomposed, or had entered into some new combination, so as to be no longer capable of forming oxalic acid. The urea, however, was left in the fluid unchanged, and exhibited its usual properties, when subjected to the action of the nitric acid.

The folid extract left by the evaporation of this urine appears to have amounted daily to  $32\frac{1}{2}$  ounces, which is about 31 ounces more than the quantity usually discharged. The proportion which the salts in the urine bear to the urea has been variously estimated; according to Mr. Cruickshank, the weights of each are nearly equal \*, whereas M.M. Four-croy and Vauquelin, suppose the saline sub-

<sup>\*</sup> Rollo on Diabetes, p. 439.

stances to be only to of the weight of the extract\*. This latter calculation I am inclined to believe is fomewhat exaggerated, although certainly much nearer the truth than that of Mr. Cruickshank. Upon the whole, I think we may state the proportion at about To. Supposing the average quantity of solid matter daily discharged by the urine in health to be 693 grains, the different saline substances will be 70 grains; and according to the experiments related above, in this diabetic patient they would amount to twice that quantity, i. e. to 140 grains. We shall, therefore, have 15,504 grains left for the animal matter discharged, and the proportion between the falts and the animal matter will be nearly as I to 100. I found the effect of alcohol upon the diabetic extract to confirm this idea of the proportion of its constituents to each other. One drachm of the extract, being kept for some time in boiling alcohol, was nearly dissolved; the residue amounting apparently to no more than half a grain.

The presence of saccharine matter in diabetic urine has long been distinctly ascer-

<sup>\*</sup> Annales de Chimie, T. 31. p. 68.

tained, both from the sensible properties of the fluid, and likewise from the power which it possesses of experiencing the vinous fermentation, and of producing the oxalic acid. Until lately, however, physiologists have been satisfied with merely ascertaining the existence of the fugar, and they appear never to have inquired, whether it constituted the whole or only a part of the residuum. The experiments of Mr. Cruickshank, the earliest accurate experiments which were made on the subject, at first view lead us to conclude, that the extract is entirely composed of saccharine matter, for he informs us that he obtained as much oxalic acid from a given weight of the extract, as from the same quantity of sugar \*. Upon a closer examination of his experiments, however, it will appear that he is not warranted in drawing this conclusion from them. He informs us that he was able to procure from an ounce of sugar a quantity of oxalic acid equal to 4 drachms and 20 grains, whereas it feems that, from the same weight of diabetic extract, he only obtained three drachms of oxalic acid †.

<sup>\*</sup> Rollo on Diabetes, p. 429. † Ibid. p. 429. 468. The

The crystaline matter which is produced by the action of nitric acid upon the urea, has been described both by Cruickshank and Fourcroy; Mr. Cruickshank makes no mention of the production of this peculiar substance, upon the application of nitric acid to the diabetic extract; but appears to have confidered the whole of the crystals formed as being oxalic acid. The same opinion is more decidedly supported by M.M. Nicolas and Guaudeville, who, in their late experiments upon diabetic urine, distinctly notice the absence of this substance, and point out the want of the urea as one of the distinguishing characteristics of this disease\*. My own experiments, however, have afforded me very different results. I mixed a quantity of the dry diabetic extract, with 6 times its weight of a mixture of equal parts of water and nitric acid. It was treated in the manner usually adopted for obtaining oxalic acid from fugar, and a quantity of crystals were accordingly formed, which at first view appeared to be composed of this substance; but in which, upon a closer inspection, besides the long spiculæ of the oxalic

<sup>\*</sup> Annales de Chimie, T. 44. p. 62.

acid, I discovered a portion of the flat lamellated scales, which are produced from the uréa. By repeating the experiment, and closely watching the progress of the crystallization, I conceived that the oxalic acid was first formed, and afterward the flat scales; and I consequently thought, that by interrupting the process, it might be possible to procure them separate from each other. Accordingly from the same portion of extract, 2 sets of crystals were obtained; in the first nothing but oxalic acid was visible, while the second appeared to be principally composed of the nitrate of urea. The proportion which they bore to each other, was about 6 parts of the oxalic acid to 1 of the latter substance. As the event of this experiment was in direct contradiction to the express affertion of the French chemists, and to the implied result of Mr. Cruickshank, I thought it necessary to repeat it until there could no longer remain any reasonable cause of doubt.

Having ascertained that the urine contained both sugar and urea, I was led to inquire what proportion these substances bore to each other, and whether the total quantity

of urea discharged in diabetes, was greater or less than that evacuated in health. As I had not yet been able to discover any re-agents by which these substances could be separately precipitated from the urine, the only means of determining this point was, by ascertaining the respective quantities of the compounds, formed by their union with the nitric acid. An ounce of fugar, when acted upon by the nitric acid, produces somewhat more than i of its weight of the oxalic acid; the same quantity of urée, by proper management, affords about 2 of its weight of the lamellated scales. In order, therefore, that the oxalic acid and the nitrate of urea should exist in the proportion of 6 to 1, as in the experiment related above, it would be necessary that the extract should contain about 12 parts of sugar, to one part of urée. Proceeding upon this datum, and estimating the whole quantity of animal matter discharged, at 15,504 grains daily, we shall have 1192 grains for the amount of the urea, within 48 grains exactly double the quantity evacuated in health. It must, I think, be considered as some confirmation of this estimate, that by a previous calculation,

culation, we had found the different faline fubstances also to exist in the same proportion.

It still, however, remains to be considered, whether we are warranted in drawing a general conclusion from the effect of the nitric acid, upon the diabetic extract now under confideration. Although, in this particular instance, there can be no doubt that it contained urea as well as fugar, yet we cannot be affured that this combination took place in the cases examined by Mr. Cruickshank, and the French chemists. The determination of this question must be left to the decision of future experiments. It may, however, be proper to remark, that as the oxalic acid appears to be formed before the nitrate of urea, it is possible that the crystallization may not have been pushed far enough in those cases, where oxalic acid only is stated to have been procured. Even where the process is properly conducted. but where there are no particular pains taken to obtain them separate from each other; the quantity of the oxalic acid is so much greater, and its peculiar form renders it so much more conspicuous, that the scales might

be very easily overlooked by a person who did not suspect their presence. My patient was certainly, in every respect, a perfectly fair subject for the experiment; the proportion which the folid bore to the fluid part in his urine, was as great or greater than in any case upon which accurate experiments have been made \*, and with respect to the extract itself, its saccharine impregnation was so confiderable as to enable it to crystallize spontaneously; a proof that it existed in more than the usual proportion. Among the cases detailed in Dr. Rollo's publication, as either seen by himself, or of which an account is given by his correspondents, there is only one, viz. that of Mr. Shirress's, in which the extract could be obtained in the folid form; in general, it was only reducible to the state of honey or melasses.

The

<sup>\*</sup>In the cases of Captain Meredith, and of the General Officer, detailed by Mr. Cruickshank, the extract lest by evaporation, amounted to between I and I of the weight of the urine employed. M.M. Nicolas and Gueudeville, state the proportion to be I. In the cases related by the correspondents of Mr. Cruickshank, and by Dr. Home, and Dr. Dobson, the weight of the urine, before the process, is not given with sufficient precision to enable us to obtain the exact proportion.

The peculiarities in this patient's urine may be stated as follows;

- 1. The extractive matter of the urine discharged in the 24 hours, was about 31 ounces more than the quantity discharged in health, or about 22 times the usual quantity.
- 2. The water evacuated during the same period, was about 219 ounces more than the ordinary quantity, or about 6 times the quantity in health.
- 3. About twice as much urea was discharged as in health.
- 4. The urine appeared to contain the same saline substances as in health, and in the same proportion to each other; but they, as well as the urea, existed in about twice the ordinary quantity.
- 5. About 30 ounces of faccharine matter were discharged daily.

The situation of this patient prevented me from ascertaining, with any degree of precision, the proportion which the urine bore to the substances received into the stomach; but upon the whole I feel strongly inclined to agree with Dr. Lubbock, in supposing that

they will be found to correspond\*. It has, no doubt, been frequently observed, that the urine has exceeded the liquid part of the diet; but in these cases it must be remembered, that the morbid increase of the appetite will cause an unusual quantity of food to be taken, a large proportion of which always consists of water. Except the kidney, there is indeed no obvious exit by which the contents of the stomach can be evacuated; the perspiration is checked, the alvine discharge is, in general, not increased, and the weight of the body is daily diminishing.

It has been discussed whether the stomach or the kidney be the primary seat of the discase; if the experiments related above be supposed to throw any light upon this question, they will tend to prove that both these organs are in a morbid state. The excessive increase of the appetite, accompanied with an apparent defect in the process of chylisication, appears to demonstrate, that some disease exists in the digestive organs, to which the emaciation may be referred. But we have also found that the peculiar matter which is ela-

<sup>\*</sup> Med. and Phys. Journ. V. 5. p. 59. '

Borated

borated by the kidney, is secreted in twice its usual quantity, a circumstance from which we are induced to conclude, that the action of this organ is very considerably increased.

Notwithstanding the assertion of Dr. Lubboch \*, I think it is established upon the most unexceptionable testimony, that the saccharine quality of the urine is diminished, or destroyed by a total abstinence from vegetable food. In this case it may be presumed, that the sugar is no longer formed merely because its component parts are no longer presented to the stomach, not from any real change in the state of the assimilation; so that we can scarcely expect to derive from this practice more than temporary relief. Dr. Lubboch attributes the formation of the fugar to the want of perspiration, supposing that the hydro-carbone, which would otherwise be difcharged by this fecretion, is converted into faccharine matter †; an hypothesis which the present state of our knowledge is not sufficiently advanced to enable us either to difprove or confirm. The English physiologist will probably feel little inclined to acquiesce in

<sup>\*</sup> Med. and Phys. Journ. V. 5. p. 63. + Ib. p. 62. VOL. VI. S the

the notions of MM. Nicolas and Gueudeville, who, after attempting to controvert the doctrines of all preceding writers, conclude, that "Le diabète est une consomption entretenue par la déviation spasmodique et continuelle, des sucs nutritifs non animalisés, sur l'organe urinaire \*."

#### CASE II.

The second case was an instance of what has been called the diabetes insipidus, in which there was a considerable increase in the quantity of urine discharged, but where the sluid contained a less proportion of solid matter than ordinary. The experiments which I had an opportunity of making upon this patient were but sew and impersect, but I conceived that they might not be uninteresting, as they are almost the only ones that have been performed upon the urine of this variety of the disease.

W. H. aged 41, a carter, attributes his disease to exposure to wet and cold in following a team, during which time he had indifferent lodging and poor diet; he seldom tasted

<sup>\*</sup> Ann. de Chimie, T. 44. p. 46.

any animal food, and was in the habit of taking very large quantities of butter-milk. The disease commenced about 12 years ago; he is unable distinctly to remember the particulars of his situation at that time, but in general recollects, that he had pain and weakness of the loins, a cough, indifferent appetite, thirst accompanied by heat and dryness of the fauces. The increased flow of urine was also perceived at the same time, and about ten years ago, he applied to a rural practitioner, whom he calls a herb-doctor, who pointed out to him its faccharine qualities; he says it tasted like sweetened tea. He remained for 12 months under the care of this man, who gave him large quantities of a decoction of different vegetables, a principal ingredient in which he remembers to have been hard-heads, the centaurea nigra of Linnæus. During its use the quantity of the urine was diminished and its sweetness destroyed, but upon discontinuing it, the morbid symptoms soon returned. Since that time he has had no medical assistance, and his complaints have remained nearly stationary, though upon the whole they are rather increased.

The symptoms at present are, an indifferent appetite, a sensation of heat and a gnawing pain at the stomach, very great thirst, occasional fickness, particularly in the morning. has a troublesome cough, attended with a copious expectoration of a tough, whitish mucus; in the morning he sometimes perceives a little mixture of blood in it, and at that time it has generally a saltish taste. His teeth are feveral of them loofe, and his gums fore. His skin is dry, and he has a sensation of soreness about the body; he feldom, if ever, perspires, and in the night is frequently chilled. He is much distressed with cramps in the hands, and the lower extremities. He has occasionally had a pain in the glans penis, attended with some degree of difficulty in voiding the urine. The respiration appears to be laborious, and he has a degree of huskiness in the voice. His strength has been gradually declining, and he is at present scarcely able to follow any employment. The general appearance is however stout, and his complexion ruddy; the pulse 80, strong and regular.

The urine voided in the 24 hours generally amounted to 6 or 7 quarts. It was of a pale straw colour, somewhat opake, and nearly without

After being kept for some days it grew more opake, and a small white crust was formed at the surface, and about the edge of the sluid. It had acquired an unpleasant, but not putrid smell; there appeared to be no tendency to the vinous fermentation. When slowly evaporated it left a residue of not more than a part of its weight, which exhibited a granulated appearance, and exhaled an odor like that of boiled milk or curds. It attracted moisture from the atmosphere, and was still acid.

Ex. 1. A few grains of the extract was added to distilled water, part of it was disfolved, but a white powder subsided, which was about half the weight of the extract employed.

Ex. 2. A quantity of the extract was added to alcohol, the mass became nearly white, while the fluid acquired a brownish tinge, about To part only of the mass was dissolved.

Ex. 3. The extract was speedily dissolved by nitric acid, with the disengagement of nitrous gas; after the addition of several successive portions, the acid acquired a thick confistence and a deep yellow colour.

Ex. 4. A few drops of this nitric folution caused a precipitate when added to distilled water.

Ex. 5. To a mixture of equal parts of distilled water and nitric acid an equal weight of the extract was added. A violent action took place, the fluid assumed a brownish colour, but the greatest part remained undissolved. By a gentle evaporation, a brownish mass was produced, in which no crystalline appearance of any kind was observed.

Ex. 6. Equal parts of the aqueous folution from No. 1., and the infusion of galls produced a small quantity of a white, flaky precipitate.

Ex. 7. The aqueous folution produced a copious precipitate with the acetite of lead. This precipitate was dried, and then added to 30 times its weight of boiling water, but no perceptible folution took place, and a very flight cloud only was formed by the addition of potash.

These experiments, though in many respects imperfect, sufficiently demonstrate that this urine differs materially from its natural state. The extract produced by the evaporation of healthy urine amounts to about  $\frac{1}{30}$  of

its weight, and in diabetes it generally exists in a much greater proportion, yet in this instance the solid residue composed only 30 of the weight of the fluid. From the 1st experiment we learn that the phosphate of lime, which in general forms only an inconsiderable part of the residue, in this case constituted nearly 1/2 of its whole weight, and from the 2d, we may conclude that the urée which commonly amounts to 30 of the whole refidue, here formed - part only. This deficiency of urée is also confirmed by the 5th experiment. By comparing together the 1st and 2d experiments, we may conclude that the urine contained the phosphates of soda and ammoniac in confiderable quantity; and from the 6th, it may be inferred that it posfessed about the usual proportion of gelatine. From the 7th experiment it would appear that this urine is deficient in the muriate of foda, as well as in the urée.

In order to determine whether this urine contained any faccharine matter, the nitric folution of the 3d experiment was flowly evaporated. It was reduced to a brownish mass, in which, by the affistance of a microscope, crystals were discovered; some of these S 4

seemed to be of a long, and others of a square shape, but in both cases they were indistinctly formed. A quantity of the crystals was added to lime water, and a slight precipitate consisting of a fine white powder was immediately thrown down. After some time another precipitate of a flocculent appearance began to be formed, which gradually subsided. Neither of these appearances were observed, when the crystals were added to distilled water. The brown mass rapidly attracted the moisture of the atmosphere, and was probably in a great measure composed of nitrate of lime. The first precipitate seemed evidently to depend upon the oxalic, and the fecond upon the phofphoric acid; hence we may conclude that the urine contained a minute quantity of fugar.

There are several particulars in this case which deserve attention, more particularly if we might be justified in considering it as a specimen of the usual state of diabetes insipidus. It is obvious that the stuid evacuated was not merely the natural urine diluted, because although there appears to have been a remarkable desiciency of the urée, and probably also of the muriate salts, the phosphates were found to exist in perhaps a greater proportion

portion than ordinary. This case of diabetes differs from the usual form of the disease, in the loss of appetite which appears to have taken place from its commencement; but the most remarkable circumstance is the length of time which the disease sublisted, and the spontaneous removal of the faccharine impregnation from the urine, at the same time that its quantity was not reduced, and the health of the patient continued gradually to decline. There was in this case less emaciation than is usually observed, which may be ascribed partly to the chronic state of the disease, but more to the small quantity of solid matter, which was carried out of the fystem by the urinary discharge.

Liverpool, October 19, 1804.

## ARTICLE XXII.

The following circular Letter having been transmitted to the Corresponding Members of the Medical Society, the Answers to the Queries are now published without Alteration or Comment.

The Medical Society of London, of which you are a Corresponding Member, convinced that every medical practitioner will consider the late Epidemical Disorder, commonly termed the Influenza, as an object peculiarly worthy of investigation, and wishing to collect for publication a complete history of the disease, earnestly request your Answer to all or any of the subjoined Questions.

1. Has any Epidemical Disorder appeared in your neighbourhood during the present spring, which differed from the usual diseases of the season?

- 2. On what day did it first shew itself?
- 3. When was it at its greatest height?
- 4. When did it disappear?
- 5. What were its fymptoms, particularly the most urgent?
- 6. Did they vary much in different individuals? Were they similar in members of the same family, in those of equal age, of similar constitutions, and of different sexes?
- 7. Has it been fatal when apparently unconnected with other diseases?
  - 8. What proportion of fatality occurred?
- 9. What ages, classes, or constitutions, were most obnoxious to the disease, and felt it most severely or fatally?
- greatest?
- 11. What did you find the best mode of treatment?
- or local, emetics, purgatives, opiates, sudorifics, blisters, or other remedies; and in what circumstances were they employed?
  - 13. What was the proper diet?
- 14. What temperature was the most beneficial?

- 15. What was the usual mode of its termination?
  - 16. Were relapses frequent?
- 17. Were the lymptoms of relapses similar to the original attack, and were they more or less severe?
  - 18. Did convalescents recover speedily?
- 19. In what state were they left by the dis-
- 20. What was the best treatment during convalescence?
- 21. What were the concomitant disorders which appeared to combine with the epidemic, and were they severe and fatal?
- 22. Has the present influenza appeared to you to be contagious or not, and on what facts did you ground your opinion?
- 23. In manufactories, schools, public institutions, and other collections of people, how did it appear, and what was its progress?
- 24. Were a number of persons frequently affected in the same house, at the same period, or in succession; and at what intervals?
- 25. What are the fites, and other local circumstances of the places in which you have made your observations?

26. To

- 26. To what winds are they particularly exposed?
- 27. What places in your neighbourhood were affected with the disease previous to that in which you reside, and what immediately afterwards; and has the progress of the Epidemic in these cases appeared to be in any degree regulated by intercourse?
- 28. What meteorological remarks have you made previously to the rise, and during the progress and decline of the epidemic?
- 29. Have you remarked whether the progress of the disease has in any degree sollowed the direction of the wind; and if this has appeared to be the case, can any deviations from such uniformity of progress be accounted for from any remarkable intercourse between different places?
- 30. Did you see any of the former influenzas, and what are the analogies of the prefent with them?
- 31. Previously to, or during the prevalence of the disease, did you notice any epizoötic complaint?
- 32. What other remarks have you made on this subject, which are not included under the present Queries?

The Society being desirous to ascertain whether the Epidemic be contagious or not, and to collect such meteorological observations as will throw light on the natural, as well as the medical history of the disease, particularly request your attention to these objects.

They do not mean to limit the answers of their correspondents to their own observations, but will receive with pleasure any information relating to the above questions, which their corresponding members may have procured, and which they conceive authentic and valuable.

Their Lordships the Post-master General, on an application made to them, considering it as a matter interesting to the community, and in the hope of the information obtained proving eventually of benefit to the human race, have, with the utmost liberality, confented, that the correspondence upon the specified objects of the foregoing queries shall be carried on free of expence, provided that the replies to them be sent addressed to the Medical Society of London, in letters not sealed, under cover to Francis Freeling, Esq. London.

It follows of necessity, that the correspondence to be so franked, must be strictly confined to the subject of the queries.

Signed by order of the Society,

Secretary.

Medical Society House, Bolt Court, Fleet Street.

# ARTICLE XXIII.

The following is the Answer of Dr. Luke M'Can, of Armagh, in the North of Ireland.

August 6, 1803.

- 1. Almost every acute disorder combined with catarrhal affection that appeared in this country since January last, went by the name of Influenza.
- 2 and 3. Physicians were seldom applied to before the disorder came to its height, it generally commenced as a common cold or catarrh, and was considered as such for some days, sewer or more, till an additional fresh cold, a wetting, or other cause, rendered it more serious, and obliged the patient to take to his bed.
- 4. In some sooner, in others later, according to its degree, the form or variety it assumed, the disease it was combined with, the constitution, predisposition of the patient, and the manner it had been treated; in some cases when vigorously attacked in its commence-

ment with an active medicine that operated briskly in every direction, quâ data porta, it was cut short, and as it were choaked in its cradle, at least as to its febrile symptoms; in some it was a business of some weeks, with the best care; I have heard of some who laboured under it for months past, and still linger under its consequences. It has not lest the country yet, June 30.

- the fymptoms were a confused uneasiness of the head, heaviness and lassitude of the eyes; the parts about the eyes, and in some the whole countenance swelled with a bloated puffy appearance; a storid ruddy colour, in-flammation, and in some ulceration of the internal sauces; generally a relaxation of the uvula; cough, with a sense of, as some expressed it, an uneasy rawness, others a burning heat down the chest. This was the simplest form of the disease; the most urgent symptoms were those that alarmingly affected the head, lungs, and bowels.
- 6. Varied in different individuals, symptoms were generally of the same species in members of similar constitution of the same family, but Vol. VI.

fometimes of different degrees of severity; the young, plethoric, and robust of the male sex, were the most severely affected with thoracic and pneumonic affections; the semale sex with affections of the abdominal viscera, bilious and obstinate constipations of the bowels, which, if not removed, the sick became yellow, and died in great distress.

- 7. Scarce any died of simple catarrhal Influenza, unconnected with some other concomitant of the disease.
- 3. Very few of those who had timely regular treatment died in this place; I lost none of those whom I had the timely management of; I was called to some in the extremity of a pneumonic affection of the disease, whom I could not recover. By the report of the clergy of all denominations, in the remote parts of this county, there has been a great fatality in their respective congregations; I have been told by a Roman Catholic Priest, ten miles distant from Armagh, whom I had been called to see ill of the disease, about the latter end of June, that scarce a day elapsed, for some time previous, without four, five, or more deaths of his congregation; I have had similar reports from

from Protestant clergymen, I believe, however, that the greater part of them died without medical assistance.

- 9. Individuals of all ages, classes, and constitutions were obnoxious to it, and individuals of all classes and ranks, from the lord and first commoner down to the beggar. Lord Enniskillen, and Thomas Connolly Esq. are faid to have died of it. The young, strong and plethoric, suffered most from exquisite pleurify and peripneumony; the elderly, plethoricand asthmatic, from apoplectic and pneumonic affections, both true and spurious; the weak, languid, and relaxed from low fevers; the concomitant seemed to be connected with the constitutional predisposition of the patient. and made its greatest impression on the most irritable and susceptible organ, or part of the fystem.
- 10. According as they were constitutionally predisposed, and exposed to the exciting cause, of married people, I think I have observed more husbands than wives ill of it.
- 11. I endeavoured to adapt the treatment to the exigency of the symptoms; in affections of the head and thorax, when the degree of sever and state of the pulse indicated, or even

feemed to admit it, I bled freely and repeatedly, and always with advantage; the state of the pulse did not always correspond with the degree of pain; in those cases, sometimes local blood-letting, and sometimes a blister was employed for relief; sometimes a severe pain continued low in the left fide after blood-letting and bliftering had been tried; this was imputed to an affection of the spleen, congestion in the colon, or other visceral affection, and was most effectually relieved by active cathartics; evacuants, and purgatives, were generally continued, and emetics repeated, in some cases, during the course of the disease. In catarrhal cases, with cough and fever, I employed mucilaginous and nitrous medicines, combined with antimonials; for elderly people, labouring with pulmonary infarction, difficult and scant expectoration of tough, viscid mucus, along with blood-letting and bliftering, where judged necessary, I employed the more acrid expectorants; ammoniac, asafætida, squills, sal cornu cervi, seneka, &c. in such forms as the patient liked best, sometimes combined with kermes mineral, tartar emetic, or antimonial powder. In congestion and constipations of the bowels, to which there was a general tendency, employed

I employed the more active purgatives, extractum catharticum with calomel, which, along with removing constipation, also removed hiccup and yellowness: every variety and concomitant of the disease was connected with bile, and required considerable attention to the state of the bowels.

- 12. Nearly answered in the preceding; opium was seldom employed, except to mitigate cough after the inflammatory stage of the disorder had been subdued; it answered that intention better with young, than with elderly people labouring under pulmonary infarction, with scant expectoration of tough, viscid mucus.
  - 13. I adopted cooling, diluting, simple diet.
- 14. That temperature which neither excited cough by its cold, nor increased fever by its heat: 55 of Farenheit might be a proper temperature, but in general it was endeavoured to regulate the temperature by the patient's feelings.
- 15. Simple Influenza, unconnected with other diseases, sometimes terminated by perspiration, from which the sick in general expressed relief, sometimes in spontaneous diar-

T 3

rhœa, but after the feverish symptoms vanished in that way, a cough, want of appetite, with a bad taste in the mouth often remained behind, which were removed by an emetic, and suitable remedies for the cough. When combined with exquisite pleurisy, or peripheumony, it required medical affistance; its resolution was expedited by blood-letting, general and local blistering, mucilaginous and acrid expectorants, attenuating, diluting regimen, &c. in cases of inflammatory pneumonic affection, where adequate blood-letting had not been employed, the disease sometimes terminated in vomica, and often in death.

- 16. Very frequent.
- 17. Similar, in some cases less severe, and required less consinement, in some cases tardy and obstinate enough.
- 18. Very flowly, and were long in recovering the ability of their usual exertions.
- 19. In a state of debility, and inertness of the faculties and exertions of both body and mind.
- 20. A moderately generous regimen, light perspirable diet, paying due attention to the state of the bowels, preventing and removing costiveness, guarding against cold, the hurtful influence

influence of which convalescents were susceptible.

- 21. Apoplexy, hemiplegia, paralysis, at least inertness of the lower extremities, pleurify, pneumony, both true and spurious, acute rheumatism, bilious remittent and low fevers, fometimes with petechio, severe and fatal in many instances.
- 22. Many individuals have taken the diforder without any intercourse with the sick; I have feen some instances of one individual in a full family ill of the disease, and all the rest escape; I have known wives sleep with their disordered husbands without being infected, and husbands sleep with their fick wives with equal impunity; I cannot fay that any fickened by immediate contagion or intercourse with the fick, but as they happened to be constitutionally predisposed, and incurred, or were exposed to the exciting cause, which, when closely investigated, could in general be traced up to some evident cause, as exposure to cold air, change of bed, or damp bed, laying aside heavy cloaths, and putting lighter, over-heating and getting cold afterwards, fatigue, a wetting, or some such cause; the hurtful impression

pression of cold, however incurred, was the most general occasional cause, both of the primary disease and subsequent relapse. I cannot say that human essuring had any essect in propagating or multiplying the epidemic; many more of the inhabitants of the most remote and thinly peopled parts of the country, in proportion to their numbers, were ill of the epidemic, and suffered a much greater satality from it, than the inhabitants of the most populous streets, and closest lanes and alleys.

23. In general, collections of people, who were immured or inaccessible to the inclemency or viciflitudes of the weather, escaped the disease better than those who were at large and exposed to its hurtful influence: the Influenza was not known in the jail or county infirmary of this place. - Of upwards of 400 men of the 18th regiment, who lived in their barracks here for ten months past, paraded, messed and slept promiscuously, but were kept to regular hours, no more than eight of them had the Influenza, while at the same time, upwards of ten times that number of the county militia regiment, that was recruiting here for about three months past, billetted about the country,

country, straggling, and exposed to all weathers, got ill of the disease; their surgeons assured me they could not confider it contagious from intercourse with the sick. Children at a school time of life, from six or seven to twelve or thirteen years of age, in general had the difease very slightly, very sew of that age died of it; I have heard of some younger children who had a fore throat with hoarfeness, and died fuddenly of suffocation. Of upwards of feventy boarders of the Rev. Dr. Carpendale's school here, who all passed the day in school together, messed and played promiscuously, continued to sleep in their respective dormitories, without any removal or feparation, twenty five had the influenza so slightly as not to require medical affistance, and all in succession. Some at the interval of one, two, and three days, some after ten days or a fortnight since any had been ill of it. Dr. Carpendale could not observe that those who slept in beds the most contiguous to the sick, were more disposed to take the disease, than those who slept the most remote from them.

After an interval of five weeks fince either school boy or other individual of Dr. Carpendale's family had the Influenza, one boy

boy of twelve years of age was taken ill on the 17th of June; he got an emetic and was purged with Ching's lozenges, on the suspicion of worms, without relief, before any medical aid had been applied to. I was called to see him on the 19th; he then complained of a cough with difficulty of breathing, fore throat, a rawness down his chest, and a severe pain in his right fide, was hot and feverish; on inquiring into the cause of his illness, was told he had got a wetting, and fat in his wet cloaths to conceal his having been out; he was ordered to lose seven ounces of blood, and if the pain of his fide should not be relieved by the blood-letting to have a blifter immediately applied to it, and was put on a laxative saline mixture; he said the pain of his fide and difficulty of breathing were intirely removed by the blood-letting, the laxative mixture brought away nine or ten bilious stools. On seeing him next day, he told me he had no complaint, but the cough and foreness down his chest, which were still troublesome to him; they were much relieved by mucilaginous oily mixture with elixir paregoric; he continued a prosperous convalescent for two days longer, then got out of bed and would not stay behind

his brothers, who were going home for the vacation; I heard line he had been rather flow in his recovery after he got home, but did not take to his bed.

Of ten little girls of the same ward, of a female charter school here, who lived, messed, and fat at their respective employments together, four had the Influenza, all in fucceffion; of two fifters one was laid down as the other was getting up; they got but little medicine, some physic, and antimonial wine that the apothecary of the house gave them. In another ward of the same charter school, ten of fixteen took all ill together, but the hair had been cut off them all the day before: the mistress of the smaller ward, who had been an ailing fickly woman, was feven days seriously ill of the disease; the mistress of the larger ward, who is a strong healthy woman, escaped it hitherto.

24. I have seen one individual of a full family, and no more, ill of the disease; have seen a parent and two or three children down together, and the other parent keep free of the disease; they sickened in succession, some at one, two, and three days interval, some at the interval of a week and longer.

25. The

- 25. The city of Armagh, lat. 54, 21, long. 6, 36, 30, is built on an elevated fituation, upwards of 300 feet above the level of the fea; the country about it is hilly, also the boggs and marshes well drained, and converted into arable ground, meadow, and good pasturage; so that dysentery is never an endemic or local disease, and intermittents are scarcely known now among us.
- 26. To the S. S. W. N. W. N. and N. E. mostly since the epidemic appeared here.
- 27. The first place I saw the disease was at Tanderagee, about ten miles south-east of Armagh, about the latter end of January 1803. A lady and three of her children got ill of it, they took it in succession.

The next place was about a mile due fouth of Armagh, much about the same time, or a very few days afterwards, the husband and sather of a family, having over-heated himself at work, and gone to bed as he thought well enough, awoke with a severe cough, burning pain down his chest, and violent pain in his lest side, which killed him in a short time. There was no intercourse between him and the samily of Tanderagee. It may be observed that the mortality attending the disease, combined

bined with pain in the left fide and top of the left shoulder, attended with fever and pneumonic affection, impressed such despair on the minds of many of the common people, that when these symptoms met in the same person, he was in many instances abandoned to his fate, without any attempt or endeavour for his recovery; but even these cases were got the better of, by an adequate blood-letting, not ascertained by a limited quantity, or number of ounces, but by bleeding freely without interruption, till there was a remission of pain, and facility of respiration.

28. I made no meteorological remarks previous to the epidemic, kept no register of the weather, but recollect the summer 1802 was cold and wet, a bad hay harvest, the beginning of autumn was remarkable for heavy rains and floods, continued so till about the 20th of September, the weather then became seasonably temperate, and continued so till the latter end of November; the prior half of December was remarkable for long continued rains and great floods; the third week temperate with a mild frost of three days standing, succeeded, during the course of the following week, by tempestuous windy weather,

with fevere, heavy, long continued rain, occafioning as great inundations here, as remembered by any man then living.

1803. January, weather moderate for the feason, with four days frost, scarce any snow.

February, weather rather mild for the feason, frost one day, 5th, only a few showers of snow on the 18th. - March, weather variable, but tolerable for the feafon, two days hoar frost, no snow. - April, weather the first eight days showery wet, and windy; from S to 17 remarkably fine warm weather, the wind was due fouth, the five best of those days; from the 17th to the end, the weather was cold and wet, with gales and fudden gusts of wind, showers of hail, sleet and snow, which was conspicuous for some days on the distant mountains; more hail, sleet and snow fell in the last fortnight of this month than in the three preceding. The wind was due west fouth-west, N. and N. W., during these 17 days; the epidemic was more rife and fatal here during this month, May and beginning of June, than any time before or fince,

May, much rain and high wind for the first four days, from 4th to 9th mild season-able

able weather, from 9th to 25th for the most part cold, cloudy, disagreeable weather, from that to the end, mixed moist weather, with some thunder and lightning. On the 29th June, cold, wet, gloomy, unpleasant summer weather till after the 20th; seasonable good weather from that to the end; disorder much abated in frequency, though there were still some individuals and families ill of it; it now assumed more of a typhoid form, and fatal to several.

- 29. I believe it came here in a fouthern direction; heard of its being rife in Cork and Dublin, previous to its coming here; it made its first appearance in this county in the latter end of January 1803; the wind was in a S.E. direction the greater part of that month; the epidemic was most rife and fatal in the month of April; the prevalent winds then were the S.W.S., W. and S.W., the deviations from that progress have not occurred to me, or for want of due attention have escaped me.
- 30. I recollect the Influenza of the latter end of 1775, and beginning of 1776; also the Influenza of 1782 and 1800, they were mere catarrhal and pneumonic affections with some

fome degree of fever, but not combined with other disorders.

- 3. Not clear in the meaning of the word epizootic, if it does not imply brute animals; if so, I recollect that horses had a disorder similar to the Influenza, in the spring of 1802, attended with severe hard cough, laborious difficult respiration, fever and great prostration of strength; I had two of my own so affected, they were plentifully blooded, kept on foft mashes, got a ball composed of aloes, sal polychrest, extractum glycyriliyza aā 3 ss. calomel, kermes mineral aā Di, twice a week, of Is nitre and grana x of tartar emetic, three times a-day, the days on which the purging ball was not given; it terminated favourably by a plentiful discharge by the nostrils; with some it terminated in farcin, and heart strangles, fo called, and some it killed. Calves were very difficultly reared then, and many of them died in the attempt; the bloody murrain prevailed much among horned cattle this spring and summer, and many of them have died of it, calves also die in the rearing.
- 32. The most interesting remark, if not to the faculty, at least to the community, is that the epidemic has very much abated; since the summer solstice, it seemed to be in some mea-

fure succeeded by the measles and small-pox, which, however, were not very general nor of long continuance, they seem to have taken their slight along with the Insluenza; I have not seen or heard of either measles or small-pox these three weeks past; I have seen but one serious case of Insluenza during the month of July, it was since the measles and small-pox made their exit; it is hoped it has now made its exit also, not to return again with its late concomitants.

#### ARTICLE XXIV.

From Dr. ROBERT PERCIVAL, Dublin.

- 1. None but the influenza.
- 2. Say month, and I answer that in January last, cases occurred like influenza but sporadically.
  - 3. In the midst of April.
  - 4. Not altogether yet ceased, May 28.
- 5. Cough, oppression of chest, vertigo, pain of back and limbs, pain of face and jaws, noise of ears and deafness, extreme weakness and lowness, even fainting, without serious consequence.
- 6. Given the constitution, &c. sufficiently similar; varied in individuals.
  - 7. No.
  - 8. Answered.
  - 9. Bilious.
  - 10. Equal.
- 11. Antimonial, sometimes mercurial evacuants at first, thin mist camphor. blisters, expectorants, gentle sudorisies.

12. Su-

- 12. Sudorifics were injurious without previous evacuation of primæ viæ.
  - 13. Not too low.
  - 14. Moderate.
  - 15. Imperfect, i. e. without criss.
  - 16. Yes.
  - 17. Yes, but often more severe.
  - 18. No.
  - 19. Weak.
  - 20. Mens hilaris, requies, moderata-dieta.
  - 21. Bilious.
- 22. Contagious, for it travelled from place to place, prevailed in London before it came to Dublin, is now epidemic and violent in fome country parts of Ireland.
- 23. No experience of my own, am told 60 boys (nearly the whole number) at Ennishillen school, were ill at once.
- 24. Yes, at the same time, so that in some houses the sick were left unattended.
  - 25. Those of Dublin are sufficiently known.
- 26. Dublin has mountains to the fouth, but at such a distance as scarcely to shelter it.
- 27. Answered in part, can say no more from certain information.

- 28. Winds harsh and dry (N. W. principally) since January, no equinoctial storm, little or no rain, no genial spring weather till since 25th May, when heavy rain began with S. W. wind, a dry and backward spring, on the 24th May the leaves of the platanus, walnut, acacia, in a garden one mile to the south of Dublin, almost inconspicuous.
- 29. Influenza prevailed at Cork before Dublin.
- 30. Yes in 1782, particularly in London, and fince in Dublin—weakness and lowness the most characteristic symptom.
- 31. Lately dogs have had fore eyes. I believe generally.

32. None.

# ARTICLE XXV.

From Dr. LONGFIELD, of Cork.

June 30, 1803.

We had no prevailing epidemic in this city, or the adjacent country, during the spring. On the contrary, the year in general was very healthy, previously to the appearance of the Influenza.

By our observations the Influenza made its appearance about the 20th of March, was at its height about the 20th April, and disappeared about the 20th May; some few cases, however, were seen in the beginning of June.

It commenced with coldness, shivering, violent pains in the forehead and across the back and chest; extending down the thighs, with a sense of coldness along the spine, remarkable and unusual debility, with great restlessness, in many the weakness was so great as to produce fainting; particular and strange confusion of the head, at times increasing

creafing to delirium, defluxion from the eyes and nofe with swelling of the palpebræ; very distressing and frequent cough, with little expectoration, some cases, however, occurred in which there was no cough, but a general rheumatic affection; a great tendency to sweating was a frequent symptom. Tongue had a peculiar creamy appearance, urine mostly turbid, and many patients observed an unusual high colour of that secretion, refembling what is observed in affections of the liver. Pulse commonly about 100, but in some it reached 120; in many instances the fever was exceedingly high for two or three days; a pain, referred to the stomach, was in many a very distressing and depressing symptom, as was also an uneasiness in the bowels; about the fourth day the febrile symptoms generally abated, but the cough continued to harass much, with loss of appetite, languor and general debility, with great emaciation.

The symptoms were nearly the same in all, differing only in degree and violence, making allowance for constitutional complaints, which were very commonly aggravated to a considerable degree; those who suffered most

from its attack were fuch as laboured under pulmonic complaints, and to many of these it proved fatal.

The proportion of these who died was very fmall, when unconnected with any other constitutional complaint. The old and infirm felt it very severely; as did children at the breast, many of whom died. It seemed to attack equally males and females.

As to the treatment—Antimonials, for the first two or three days, were employed with considerable benefit in lessening the feverish state, which seemed for that period to partake very much of an inflammatory nature; and consequently did not (as far as our observation went) bear opium, a remedy which we have repeatedly found prejudicial in coughs, where there was any tendency to an inflammatory state.—Bleeding was in most instances inadmissible, in a very few cases, however, it was practifed with advantage. - Purgatives, in almost all cases, were of considerable service, as there appeared a great disposition to costiveness. The aq. ammon. acet. was found a useful diaphoretic, and camphor has by some practitioners been employed usefully for U 4 quieting

quieting the very great restlessness attendant on this disorder.—Blisters we seldom experienced much benefit from. A low, diluting diet was most proper in the first stage of the Influenza; but towards the decline of the feverith period, that of a more nourishing kind, with wine, was both useful and necesfary, from the great debility that enfued. The most suitable temperature was that of 63°.—As to its termination nothing critical was observable. Relapses were very frequent, particularly when the weather became cold, which happened from about the 9th April to the 18th, when the thermometer fell to 48°; convalescents recovered very slowly, and relapses common on exposure to cold air.

It appeared to us to be very contagious, as fome boarding schools in the country remained free, until visited by some person who brought it from the neighbouring towns; its progress was evidently traced from England to Waterford, where it raged before it reached us. Some schools which had little or no communication with large towns escaped. It did not extend much beyond 25 miles from this city to the south-west; in most instances it went

went through boarding schools and manufactures, but progressively and gradually. Three physicians who attend the house of recovery in this city were almost immediately attacked after visiting a patient ill of this epidemic, in that charity. This city lies very low, and is exposed to the westerly winds, which prevail for nearly 9 months in the year. The progress of the disease was evidently marked by intercourse; the wind was mostly south-west during March, and the thermometer 56°, in April it changed to north-west, when the thermometer fell to 48°, at which time the Influenza became most violent and general.

The former Influenzas, as far as we remember, were by no means so violent, nor attended with such debility and languor.

Many horses, during the prevalence of this disorder, were attacked with ophthalmia and cough.

We have every reason to believe that this disorder did not spread in the direction of the wind, but according to the intercourse with different places where it raged at the time.

SIR, Cork, June 30, 1803.

You will please to present the above to the Modical Society; and at the same time to express our regret at not being able sooner to comply with their request, on the subject of the late epidemic, conveyed through your letter; but as we wished to render our communications more worthy their perusal, we endeavoured to collect from the practitioners resident here the result of their observations; such we have been favoured with, particularly from Drs. Callaman and Barry, but find that the uniform appearance of this epidemic has not allowed these gentlemen to give much more than a repetition of our own observations. We are, sir, with much respect,

Your very humble servants,

JOHN LONGFIELD.

JAMES BENNETT.

# ARTICLE XXVI.

From Mr. EVANS, of Ross, Ireland.
August 25, 1803.

In answer to the questions forwarded to me some time since, I beg leave to inform you that an epidemical disorder appeared in this neighbourhood during the spring, which differed from the usual catarrhal affections of the season, only in as much as it was attended with an unusual degree of sever, and sollowed by more than ordinary prostration of strength.

### ARTICLE XXVII.

From Dr. JAMES FLINT, Professor of Medicine.

St. Andrew's, June 6, 1803:

I confider myself to be much honoured by the appointment of the Medical Society of London, to give all the information in my power concerning the epidemical disorder that is now so generally prevalent, named Influenza. The philanthropic motive of the inquiry deserves much praise, and it would give me a most sensible pleasure, if the few observations I have made could be of any use, which I now most readily relate.

The Influenza made its appearance in St. Andrew's and its vicinity, about the middle of last April, and has not yet ceased.

The symptoms were a great prostration of strength, a sensation of cold, pains in the legs and back, head-ach, thirst, faintness, and

fome

fome actually fainted away, and continued cold fo long as to give concern for the event; the pulse was quick and small, a total loss of appetite for food, with vomiting, pain of the stomach, sickness and costiveness, and sometimes gripes and diarrhæa. They often complained of alternate hot and cold sits, and these were soon succeeded by inflammation of the throat, pains in the breast, and difficulty of breathing, and in a few instances a pleuritic stitch, and hard full pulse were present.

It sometimes began with a spitting of blood and epistaxis. It does not appear to me to be contagious, for although whole families were attacked by it, yet a few individuals of many families only suffered.

The weather has been very inconstant, the alternate extremes of cold and heat have been frequent, the wind, during the spring, the month of May and first week of June, in St. Andrew's, is commonly from the east and north-east. The extremes of heat and cold have been unusual this season.

The Influenza has not been fatal to those who previously enjoyed good health, but it has

has carried off several who were labouring under phthisis, when it attacked them.

It appears to me to have some resemblance to the Influenza that appeared about 20 years ago, but the symptoms are now more severe than they were then.

I did not observe any epiziotic complaint, either during the prevalence of the epidemic, or previously to it.

My treatment of this catarrhal affection was various according to the variety of the indications.

In general I recommended abstinence from animal food, chicken water and beef tea excepted. The chicken was freed from the skin upon account of the oil it contains, and lean beef steeped in water half an hour and then that water thrown away, which washes off the blood and makes the broth much lighter. Bread in any shape was advised, and diluting drinks, with a moderate quantity of wine, more or less according to the degree of debility.

The sickness was always relieved by a gentle emetic, sometimes a cupful of strong green tea proved an useful and gentle puke.

In the case of gripes and diarrhæa, mild obtundents, as hydrogala, an insusion of rad. Althæ and Liq. Rad. Rhæi. and gentle opiates, h. s. were useful.

I feldom employed the lancet, except in the cases of dissiculty of breathing and great pain, when the pulse was hard and full, and urine very red. In which cases v. s. gave great relief, which, with the appearance of the buffy coat on the blood, shewed the propriety of the measure. I sometimes applied leeches to the throat and breast, with advantage, when the indications for general bleeding were not so obvious.

Frequent immersion of the feet and hands in tepid water suited every case. When the patient was very weak, wine and water was given during the immersion. The promotion of a diaphoresis was of great use, by saline draughts, and diluents.

The costiveness was best removed by injections and gentle laxatives, as manna and cremor. tartar.

Blisters always relieved the pain in the throat and breast. I employed them without hesitation, because I saw them do great good.

It was necessary to command the cough by gentle opiates, as the elix. paregoric. of the Pharmac. Edinensis, syr. Diacodii, and Sydenham's tinct. opij. I never saw any harm arise from opiates, when properly administered.

The recovery of the convalescents was affisted by a more generous diet, to which they gradually returned.

In the way of medicine, tonics, as Pulv. Cinchon. Rubigo ferri mixed with Pulv. Colomb. Tinct. Martis, with gentle exercise in the open air when the weather permitted, soon restored the sick to their wonted health.

The recovery of one female patient, who lost a good deal of blood by a hæmorrhage from the nose, was very slow indeed, and gave me great concern for the event.

This made me very cautious in employing the lancet, unless when the indications for it were very evident. I am with every good wish for the success of this laudable undertaking, &c.

### ARTICLE XXVIII.

From Dr. JOSHUA DIXON, Whitehaven.

JUNE 17, 1803.

- 1. During the spring months a disease of a mixed inflammatory and catarrhal nature prevailed; which, from its universality, was justly stiled an Influenza.
- 2. It was first noticed in the month of March. Applications for relief were made at the Dispensary upon the 1st, but it did not engage the attention of private practitioners before the 13th.
- 3. It was most generally prevalent from the 15th of April to the 1st of May.
- 4. It did not subside gradually, but almost immediately disappeared on or about the 30th of May.
- 5. The fymptoms varied in different patients, but the general and most powerful were languor and lassitude, assecting the whole system. Coldness and shivering, which were succeeded by considerable heat and excessive

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perspiration; pains in the limbs and head, and frequent in the side or lumbar region; slight delirium and urgent irritation to cough, with moderate expectoration. The following symptoms sometimes occurred. Watery discharges from the eyes and nose; a sense of foreness in the fauces, extending down the traches, but not attended with inflammation or ulceration. Nausea and vomiting, with a constipated state of bowels; oppressive constriction at the chest. The pulse was rarely very frequent, though for the most part full and tense. It always became foft, and the fymptoms were fensibly relieved by a profuse perspiration. Urine of an high amber colour, depositing a copious lateritious sediment. The dejection of mind could not be accounted for, as the symptoms indicated the most favourable event. The intermitting nature of this disease was observed in several instances. When the patient supposed himself perfectly well, the fymptoms would unexpectedly recur with redoubled violence.

6. The appearance of the disease was confiderably diversified in the individuals who suffered it. In some it assumed a purely catarrhal

tarrhal form, whilst in others the symptoms were those of general sever, with an inslammatory determination to the head. The same variety occurred in the members of families, whatever was their age, constitution, or sex.

- 7. As a fingle folitary disease it was never known to be fatal in this country. The only apprehension of danger arose from its exciting the symptoms of those diseases and infirmities to which the patient was predisposed; and to this cause may be imputed the deaths of several consumptive, as although a ged and debilitated people.
  - 8. Answered in No. 7.
- 9. No age, class, or constitution was exempt from this disorder. The inhabitants, however, of high situations, and those who had arrived at that period of life in which a tendency to consumption is observed, and whose constitution had been weakened by previous disease, were most liable to suffer its severe attack. Low and damp situations were, in a great measure, free from it.
- 10. Very uncertain.—The proportion of females was greater than that of males when it first appeared, but afterwards vice versa.

quently the only mode of treatment, was that of employing a strict antiphlogistic regimen. Plentiful dilution, with mild articles, by promoting a moderate and equable state of perspiration, not only relieved the present symptoms, but effectually prevented their future recurrence. The bowels were always kept more than naturally open, and frequently an active purgative was proper.

Upon the first attack of the disease, if the symptoms became in the least violent, an emetic was prescribed: their continuance indicated the use of saline or antimonial sudorifics. It was frequently observed that James's powder, or any drastic preparation of antimony, operated very powerfully upon the stomach and bowels; hence small dozes of Vin. Antimon. to excite flight nausea and gentle perspiration, were preferred. Weak wine-whey, or any mucilaginous beverage was also drank liberally to promote this latter purpose. The irritation to cough was allayed by demulcent pectorals. The painful determination to the head was relieved by bathing the feet and legs in warm water every evening, and applying

plying, at the same time, cold vinegar and water to the face and forehead.

- 12. It never appeared necessary to prefcribe either general or topical bleeding. Several judicious practitioners had employed the former with some benefit when the local pains were violent, and except the disease assumed a pleuritic form, blisters have been seldom if ever necessary. The effects of opiates were always injurious. The operation of emetics, purgatives and mild sudorifics, as has been already observed, was useful when the symptoms were active.
- 13. The simplest food was certainly the most proper. The patient was sometimes indulged with a moderate quantity of wine in the form of whey or negus.
- 14. The disease was never so powerful as to require any accuracy in adjusting the temperature of the air in the sick chamber. A clear circulation of it was always admitted, and in this regard the feelings of the patient were chiefly consulted.
- 15. Equable and gentle perspiration obviated the purely inflammatory state of the disease, and moderate, easy expectoration removed the pectoral symptoms.

16. This

- 16. This disease very rarely recurred in a powerful degree, except from imprudence in the conduct of the patient. Exposure to cold, or any active exertion when recovering, generally produced this effect. Debilitated constitutions suffered most from this disease.
- 17. The symptoms of such repeated attacks were not materially different from those of the primary disease; but were, for the most part, much more severe; and a considerable length of time was required for the perfect recovery of the patient.
- 18. Excepting under the circumstances noted at Query 16, or where any constitutional infirmity occurred, the convalescent state was of short duration.
- 19. The effects of this disease were not peculiar. General debility, pain in the head, and irritation to cough, were the most remarkable. It was observed that convalescents were sometimes liable to suffer chronic disorders.
- 20. A nutritive diet was directed with wine; and simple bitters, as tonics, were the only medicines necessary. The bark, in any form, was never beneficial, but always hurtful.
- 21. No other epidemic prevailed at this period; nor were any diseases combined with

it, except the constitutional diseases of the patient, or those which were occasioned by imprudent conduct: and on these combinations, its danger principally depended.

vails among practitioners as to the nature of this disease, and the importance of the inquiry, have induced me to collect the facts which can assist us in arriving at any degree of certainty respecting it.

From the causes which excited it, the situations it first occupied, the state of the disease, and other concomitant circumstances, I am disposed to consider it as a purely inslammatory disease, which has rarely, if ever, been communicated by contagion.

- 1. Its origin in this country can be ascribed to no other cause than a sudden transition of the atmosphere, from a remarkable degree of heat and moisture, to a cold, dry, and windy state.
- 2. It first appeared, and at the same time, in lofty or exposed northern situations, and these considerably distant from each other.
- 3. It has been observed that the appearance of purely inflammatory diseases in this country

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is almost invariably preceded or accompanied by winds from the north or north-east, and that persons exposed to these winds are most liable to suffer such diseases. Their origin, therefore, has, with justice, been imputed to the prevalence of northerly winds. And as during the continuance of the Instuenza the wind was generally from the north, this circumstance is a strong confirmation of my opinion that the disease was of a purely inflammatory nature.

- 4. The mode of its appearance was very uncertain. Sometimes it would instantly attack the whole of a family; at others, in irregular succession, but from its progress we could not suspect its contagious power. Frequently only one was affected, and the rest of the family, though constantly attending the patient, escaped the disease.
- 5. What forms a striking contrast between the Influenza and contagious diseases, no predisposition was required for its excitement: and it might have been supposed, that if it were really of an infectious nature, it would certainly have been communicated to a healthy person sleeping, during the whole course of

the disease, with one who suffered it in the highest degree; whereas the contrary has happened in several instances.

- 6. The symptoms which constituted the disease were, in every respect, inflammatory, affecting chiefly the head and lungs.
- 7. The duration of the disease rarely exceeded 4 days.
- 8. No tendency to malignant putrescency ever took place.—
- 23. The disease was so mild in its symptoms, that only 139 have been admitted to the aids of the Dispensary. The first patients inhabited high situations, very remote from each other. Few cases occurred from the beginning till the middle of March; the disease then became very general, and continued to prevail till the latter end of May.
- 24. A considerable proportion, and frequently the whole of a large family, have been seized with this complaint at the same time. In others again its attacks were successive, but at no certain interval, and sometimes only a single instance of it has occurred. Vide, No. 22—4.

- 25. Whitehaven, in latitude 54°. 32', longitude 3°. 30'. west, is situated remarkably low, yet from its peculiar falubrity has been stiled the Montpelier of the north. It is so contiguous to the fea that the tide flows up to the town. The shore is considerably elevated, and the foil is dry and fandy. Its ventilation is promoted by the regular construction of its streets, which are spacious, and cross each other at right angles. It has also the additional benefit of being connected with a large valley, which, after a circuit of four miles, communicates with the sea. It is situated in the neighbourhood of extensive collieries and lime kilns. In the bowels of the earth, coal, lime stone, free-stone, slate, and iron ore are found in great abundance.
- 26. Westerly winds generally prevail in this situation; but during the last three months, those from the north or north-east have been most frequent.
- 27. The high northern villages in this neighbourhood, distant from each other, first suffered the disease, and it appeared soon after in Whitehaven, but the communication was

too rapid and general to justify the opinion of its arising from intercourse. The southern situations were the last to experience this disease.

28. The influence of the lunar phases upon the human constitution, in producing, and modifying disease, has been maintained by many authors; it may, upon this account perhaps, be not improper to remark that at the period (viz. about the 20th of April) when the Influenza raged most powerfully, the moon was in Perigee, or nearest to the earth. Several evenings previously to the accession of this disease slight appearances of Aurora Borealis had been observed.

Professional and other avocations have prevented me from keeping a register of the state of the barometer and thermometer.

- 29 It has been noticed at Query 26, that the most prevalent winds were from the north, which circumstance accounts for the first appearance of the disease, in villages situated to the north. Intercourse or connection with the sick had not any effect in its disfusion.
- 30. In comparing the Influenzas which have occurred in my remembrance fince the year

year 1760, I can only very briefly observe that in their catarrhal nature they were, in many respects, similar. The late epidemic was distinguished from them by its frequently assuming a more purely inflammatory type, unconnected with any pulmonic determination.

- 31. A disease called the \* Black Quarter has been more than usually prevalent this spring amongst black cattle, in the neighbourhood of Whiteheaven, and was always fatal. Horses have also suffered a slight degree of catarrh.
- 32. Under this head I may notice the diftinction between catarrh and Influenza. Such is the similarity in the appearance of the symptoms which occur in these diseases, that under particular circumstances, it must be extremely difficult to distinguish them. It may, however, be observed that, the almost universal prevalence of the latter, its frequently assuming the form of a general sever, with more or less of an inflammatory determination to the head, and at the same time a perfect

freedom

<sup>\*</sup> This incurable distemper consists in a powerful inflammation of the lower extremities, which terminates in gangrene. The progress of the disease is very rapid, and young cattle are most liable to it.

freedom from any pulmonic disease, constitute the principal difference. In our late epidemic, the effects of the mode of treatment readily discovered the nature of the disease. Febrifuge medicines relieved and recovered the patient, but oleaginous pectorals sensibly aggravated the symptoms.

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## ARTICLE XXIV.

From Dr. COLLINGWOOD, of Sunderland, Durham.

JULY 30, 1803.

Nothing gives me equal pleasure in this state of mutation as that of communicating any useful hint that may elucidate medical science, or be beneficial to my fellow-creature—shall briefly answer your queries, and occafionally venture to make a remark with deference to so respectable and learned a Society—shall answer the Nos. regularly.

- 1. An epidemic prevailed here similar to that of autumn 1775, and spring 1802, both of which I was extensively employed for, and shall, as far as my memory can help, as my remarks are lost or mislaid, lay the outlines before you.
- 2. About the first of May in this neighbourhood, later to the north, and earlier southward, by letters from France, south and west of England.

- 3. and 4. June 28th. Has not totally difappeared, but where it prevails is either a relapfe, or in habits having a predifposition to phthisis, and who seem to have that predisposition confirmed by the Influenza.
- 5. Like all catarrhal affections, the head and breast were particularly affected, the patients in general, if they gave a false step, bent their head forward or sideways, imagined, to use their own expressions, that their brains were like to fall out—Deafness and tinnitus aurium were not alike common to all, rheumatic persons, or that had been previously subject to intermittents, had a fixed pain in one of the temples, vulgarly called megrim, which, as usual, put on remittent exacerbations—a sharp cold rheum or fluid, as clear as rockwater, run from one or both nostrils, a total want of taste and smell, for upward of three weeks, affected some of my patients, quick pulse, tightness across the sternum, laborious respiration, preceded by rigor and all the other leading symptoms of pyrexia; these in most cases terminated in sour days with lassitude, feebleness of the knees, stiffness of all the joints, and great decay of strength.

- 6. Catarrhal fymptoms were similar in all ages, though, according to different constitutions, some of the symptoms were more predominant. Children, previously afflicted with the hooping cough, or who still laboured under that disease, had increase of cough, difficulty of breathing, blood issued from nose and mouth, nor are those symptoms quite gone; change of air and situation, as usual, has been attended with good effects, though I dare seldom recommend cold bathing, as it may be presumed that some of the nobler parts are affected.
- 7. It is no easy matter in practice to meet with an elementary disease unconnected with other affections. In asthmatic, rheumatic, phthisical, &c. affections, it was most violent; the deaths in old people most numerous.
- 8. In proportion not many died here, it was more fatal fouth and north, as I learned from correspondents.—This town and neighbourhood contains by estimation 50,000, out of which 100 fell victims to the disease.
- 9. More males died than females, owing to their being more exposed to the inclemency

of the weather, and not from any other predisposition.

- 11. Young subjects, many bled at the nose; bleeding was of service, but in others bleeding accelerated that debility to which the difeafe was obnoxious, without relieving the fymptoms.—Pediluvia, pectoral emulsions, &c. and if the pulse was not too high, emp. calid. sterno was of great benefit; in some cases vomits gave temporary relief, by phlegm being emitted; purging in full and costive habits was falutary, but to others occasioned increased debility. - Sudorifics, when applied too early in the disease, rather confirmed, than removed the fymptoms; but, when properly applied, were of fervice. - Synapisms in great debility raised the pulse, and produced a disposition to perspiration; but in many cases hastened the dissolution of the patient.
  - 13. Gruels, sago, slops, mutton broths, beef tea, and wine, in great debility; but in general a disrelish to all kinds of solids prevailed.
  - 14. The fouth and fouth east wind, dry and excessive cold at first prevailed, and latterly Vol. VI.

as this place lies exposed to the sea from the N. E. to S. E. was much exposed, though large coalsires, and increase of bed-cloths were injoined.

- 15, 16. It may be matter of dispute whether some colds and catarrhal affections which now prevail, (and which are common when the wind blows from the sea,) are relapses of the Influenza, or not, as those that had not the disease then, are now (July 20) labouring under colds, &c. &c. In some, the relapses were more violent than the preceding affection.
- 21. Rheumatism, asthma, irregular returns of pyrexia, though not properly coming under the character of remittents or intermittents.
- 22. Some individuals in a family say they caught the infection from others of the same family, on their return home from a journey; this is rather doubtful, though some, little exposed to the external air, were also attacked.
- 23. We have no manufactories here.
  Ship-building is carried on to a great
  extent,

extent, public schools were publicly visited:—

The other queries are all either comprehended in these, or did not come within my observation.

I shall offer a few remarks on the two preceding Influenzas, viz. that of 1775 and 1782, which, from the extent of my practice, though unaided by notes, gives me confidence in narrating.—About the 7th of October 1775, an epidemic prevailed in the shire of Galloway, S. W. of Scotland, which was general over England, Ireland, and also said by correspondents to prevail in North America, &c. it was violent in its attack, though not often fatal in its termination—the state of the air was such that a piece of beef suspended by a paper kite in the air for 20 minutes, became highly putrescent, as tried in the neighbourhood of Glasgow, a certain want of elaiticity, continual dark fog, and particular fmoky fmell in the atmosphere prevailed for five weeks, fun feldom feen, and though October and November are particularly rainy months in that country, little or no rain fell, wind east south-east and south, soft and warm

-thermometer at 56, and 60-persons of all ages were affected, and in one day whole families were confined to their rooms or to bed, so that they had scarcely a nurse left to administer to their assistance.- I think one of 500 died, mostly aged, but the phthisical symptoms of those between 18 and 36 were particularly obstinate; and some have fallen victims to confumption which had its foundation laid in the disease. It will be seen that the state of the weather was very different in this and the subsequent Influenzas, a foggy, dark, warm atmosphere, with heavy dews prevailed, till the 5th of November, when a keen black frost, and strong north-west wind, acted like a charm, and outdid all the doctors, in accelerating a recovery, and obstructing the progress of the disease. In 1782, and the present, the air was generally dry and excesfive cold, and the disease disappeared, though no great change took place with respect to the atmosphere.—I omitted saying that persons who died on the 4th, or before the 5th day, turned mottled or spotted very soon after death. If those few remarks contribute to the

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increase of medical knowledge, or be useful, I have my wish.

P. S. Most of this was wrote a month ago, but I omitted sending it, as some of my patients were labouring under relapses.

#### ARTICLE XXX.

From Mr. WAIBLINGER, of Fulneck, near Leeds, Yorkshire.

# July 9, 1803.

- I thought catarrh rather more than usually prevalent in the circuit of my practice, since the latter end of March, but cannot say I observed any remarkable circumstance differing from the usual complaints of the seafon. I had heard of the Instuenza being prevalent in Leeds, six miles from hence, for some time previous, but the latter
- 2. end of April and beginning of May it has been indeed very prevalent in the circle of my practice.
- 3. I have not attended so many cases since, as I did, throughout the month of May.
- 4. It has not yet entirely ceased in this neighbourhood.
- 5. The symptoms most prevalent were, a dull pain in the head and loins, the eyes watery, and nasal discharge considerable, frequently

quently the throat fore, in some cases violent pains in the chest and side, with difficulty of breathing.

- 6. The variety of the attack in individuals has certainly been confiderable; in respect to its violence, in several instances they have been very similar, in members of the same family, but I can draw no general conclusion from that circumstance.
- 7. In no case has it proved fatal, among some hundreds that I have attended, when unconnected with other diseases; and of these I only recollect three cases of elderly people, who had long laboured under asthma and anasarcous diseases, for a number of years.
  - 8. Answered above.
- 9. I have not observed any particular age more obnoxious to the disease than another in my practice; perhaps the older classes of life may have had it more severely.
- 10. I think the proportion of the sexes was nearly equal.
- and afterwards small doses of antimony and squills, so as to cause gentle nausea; if vascular action was very considerable, I usually

gave a few drops of the saturated tincture of digitalis with each dose, with the best effect; if the cough was troublesome, I gave a small opiate at night.

- 12. I feldom bled, and when I did it, did not perceive any good effect, though sometimes symptoms ran so high, as to apprehend violent pulmonic inflammation; yet I feldom sound any buff on the crassimentum, or relief ensuing from bleeding. Blisters were, I think, occasionally useful. The latter part of the question, as to the circumstances where they were employed, it would be too voluminous to enter into, and is, I think, partly answered above.
- ordered the patient to dilute freely with ground-ivy tea, sweetened with honey, or coarse sugar; if it did no good, it was I believe innocent, and a fort of placebo which might be useful.
- 14. The temperature of the rooms was directed to be comfortably cool.
- 15. If taken early, in nine cases out of ten, by using the above remedies, the symptoms went off completely in a few days.

In many instances, however, leaving great debility, for which it was necessary, and obviously useful, to prescribe the cortex, unless forbid by some other consideration.

- 16. Relapses were frequent.
- 17. I think in general the fymptoms were nearly similar, but mostly more severe.
  - 18, 19, 20 and 21. Answered above.
- 22. I have not completely made up my mind on this subject.
- 23. In two large schools that I attend, the epidemic has been so very various in precisely the same
- 24. circumstances, and the intervals so very different, that I can give no decisive opinion.
- 25 and 26. The fites and local circumflances of the places in which I made my obfervations, are so extremely various, that I cannot directly answer this question. I do not, however, recollect any particular difference.
- 27. The disease made its appearance in Leeds, six miles east from here, 6 weeks or 2 months before we had any thing of it.

To the remaining queries, I have nothing particular to fay.

### ARTICLE XXXI.

From Dr. BERTRAM, Hull.

JUNE, 9, 1802.

In answer to your letter of the 16th ult. which I only received on the 4th instant, conveying some queries from the Medical Society of London, respecting the late epidemical disorder, I have to say, that it will afford me much pleasure, to be able to add any thing to the stock of sacts, with which you will be furnished by your numerous correspondents, and shall therefore reply to the questions proposed in the order in which they are stated, premising, however, that although my answers may not be so explicit, yet I shall not make any remarks, unwarranted by my own observation, or that of others, on whose sidelity and accuracy I can rely.

1. An epidemical disorder has been very frequent, differing from the usual diseases of the season, which, although very general, has

not influenced every individual, as many have escaped it entirely, and others have been so slightly affected, that, had there not been any particular complaint prevalent, would have passed off without any observation.

- 2. About the 20th of March.
- 3. About the 10th of April.
- 4. About the end of April, unless in cases of relapses, when the period must of course be uncertain; for although rheumatic cases were very frequent in April and May, and by many included under the reigning epidemic, yet I think they were perfectly distinct disorders, and clearly occasioned by the season.
- tarrhal, nearly refembling those described by Dr. R. Pearson, the most troublesome and unmanageable of which was the head-ach, and when the muscles of the neck were also affected, which was often the case, every motion of the head, especially the rotatory one, was very distressing and painful. Some had violent and sudden attacks of vomiting and purging, nearly resembling cholera morbus, though the evacuations did not indicate so much

much error in the biliary secretion, either in quantity or quality, yet the bowels were, in the majority of catarrhal cases, costive. Others again had considerable affections of the fauces, constituting the Cynanche Tonsillaris, which, however, most commonly terminated in reforption.

Although it may appear objectionable to include those three seemingly distinct disorders under one name, yet I do it from a firm conviction of their being different types of the same disorder, and occasioned by the same cause, as I cannot trace that more than one of the above train of symptoms existed in the same person, either at the same time, or in succession, during the whole prevalence of the epidemic.

- 6. Except in the variety above stated (5), or influenced by any particular predisposition or previous disorder, the symptoms were nearly similar.
  - 7. Not fatal, except in very old persons.
- 8. Uncertain, but the fatality was extremely rare.
- 9. Not satisfactorily ascertained, but where it proved fatal, it seemed to do so from acting as the occasional cause, rather than by exciting the tendency

tendency to a fatal termination, previously lurking in the habit, especially in cases of phthisis pulmonalis, distinctly and rapidly accelerating the tragical event.

- 10. No decisive result from inquiries upon this head.
- 11. In those assuming the catarrhal form, full or nauseating doses of antimonic tartar, then aperients and gentle diaphoretics. For the head-achs, topical bleeding, blisters, anodyne fomentations, and the warm bath; as although opiates procured relief, they certainly aggravated the pain, after the narcotic effect had ceased, and in full doses, seemed to have a hurtful tendency in every species of the disorder; and the affection of the head, in many cases, appeared to baffle every effort of skill for a considerable length of time; although aperients, which, from the state of the bowels, were in these cases strongly indicated, seemed to produce most permanent relief.

In that variety of the disorder resembling cholera, a similar treatment to that which is found useful in the latter disease, was successful.

- 12. Although, general bleeding in those cases where an inflammatory diathesis existed, or where a tendency to it appeared, certainly produced relief, yet as those instances were very rare, and it evidently increased the subsequent debility, it was seldom had recourse to.
- 13. Low diet, diluting tepid drinks, no fermented liquor.
- 14. Unless in very urgent cases, confinement in bed was not necessary, though owing to the cold weather, it was found adviseable to keep within doors.
- 15. Without any remarkable increased secretion, but that of the kidneys, which, in many cases during the disorder, was very much diminished.
- 16. Although not frequent, by no means uncommon.
- 17. Symptoms similar to those most urgent during the preceding disorder, and often as severe.
  - 18. In some very flowly.
- 19. A very great and distressing languor and listlessness was in many cases the sequel, especially when a relapse occurred, and seemed

to be a kind of intermediate link betwixt the two disorders, thereby making it difficult to ascertain when the former ceased, or the latter began its course.

- 20. Food easy of digestion, and such as in small bulk afforded much nourishment, gentle exercise, change of air, bitters, assisted sometimes by the tepid bath.
- 21. Answered before, although rheumatic cases were very frequent.
- 22. Doubtful, although I rather am inclined to think, that it is not contagious, as individuals in families frequently escaped, and where they were all affected, the attacks did not seem to observe that regular succession which takes place in disorders arising from contagion.
- 23. There are no extensive manufactories, in this town or neighbourhood, and in the largest school, out of near eighty day scholars, about 14 only were affected, although they were not only exposed to the disorder at school, but in their different families, and intercourse with their numerous collateral acquaintances; and in the same school, out of thirty-seven, the number of which the family residing

residing in the house is composed, only six were attacked, which latter number is exclusive of the former; and in all, the disorder was so mild, as not to require the aid of a physician, which statement will corroborate my opinion advanced in the 22d answer.

- 24. Answered above.
- 25. Hull is fituated in a flat country, about 12 miles from the German Ocean, on the banks of a small river, which empties itself immediately into the Humber, two miles broad, and about 20 miles from its mouth.
- 26. Northerly and easterly, especially during the vernal months, and the latter are particularly severe from the vicinity of the sea, there being no intervening high ground, or other shelter to screen from its sharp and piercing nature.
- 27. It appeared to shape its course from south to north, and not to be regulated by intercourse.
- 28. Some very warm weather for a few days towards the end of March, which was preceded and succeeded by cold easterly winds, and dry weather.

29. The

- 29. The progress of the disease has not in any degree seemed to follow the direction of the wind.
- 30. In 1782. the Influenza did not reach Berwick, where I then refided, until the feason was farther advanced, and the weather was very warm; but having no memoranda, I cannot speak decidedly on its peculiar nature, but I recollect that it did not appear to me to be contagious. From many circumstances, but chiefly from the surgeon of the Wiltshire militia, then in barracks there, who consulted me on the most proper mode of treatment, informing me, that it did not affect the men by rooms, messes, or companies, but promiscuously, and I remember his mentioning that many of them had pulmonic hemorrhages, and others were fuddenly feized on the parade, after falling as in a syncope; and that bleeding, though strongly indicated, especially as the men were for the most part robust, proved hurtful.
- 31. None so general as to be observed, during many months preceding or during the prevalence of the disorder.
- 32. None but what are included in the above answer.

VOL. VI.

If any of my remarks appear unfatisfactory, I shall be happy to explain them farther, or to render any other service to the Medical Society.

I have a daughter at a school at Leeds, who was taken ill, in the beginning of April, and who having suffered a relapse, is now not quite recovered; she had very mild catarrhal symptoms, chiesly head-ach and sever, and much debility.

#### ARTICLE XXXII.

From Mr. CHARLES ELLIS, Hull, Yorkshire. August, 6, 1803.

Our having had the Influenza here particularly mild, when compared with the ravages it has committed in other places, may in some measure account for its not having sufficiently attracted the attention, as to enable me to answer all your questions; regretting it is not in my power to give you a more fatisfactory account of it, and one more worthy your attention, I transmit to you the few observations I made during its prevalence. It first appeared here about the latter end of February, and kept increasing until about the middle of April, when it began to decline; and fince the 24th of May I have not had one patient attacked with it.

The usual spmptoms were chilliness, rigors, pain in the head, back, and limbs, nausea, languor, and debility. The tongue, at the Z 2

first white, but before the end of the disease it became browner, particularly in the middle; in some an acrid discharge from the nose and eyes, which gave them an appearance not unlike that which they have in the measles; the pulse quick, foft, and weak; a tickling cough coming on about the third day, and gradually became more violent, with pain in the breast, dyspnœa, and a quantity of phlegm and mucus was expectorated. In this manner, with little variation, were those who had the disease in its worst form affected, who were under my care. In some it was so slight as not to confine the patient a fingle day, which has occurred in the same family, with others, who had it in a much feverer manner. There feemed to be no exceptions to it, either in age, fex, or constitution. Upon the whole I had rather more female than male patients. I attended about 120, but in no instance was it fatal; neither have I heard of its having been fo, with any of my medical friends. Emetics, the faline julep with gentle aperients, when costiveness indicated their utility, with blisters upon the breast and sides, when the pain in either was considerable, and the antiphlogistic regi-

men were the means I generally purfued for the first three or four days. When the inflammatory symptoms began to diminish, and the cough, which was always the most troublesome part of the disease, and the manner in which it universally terminated, came on, the lac. amygd. with tinct. opii camph. or when there was much difficulty in expectoration, occasionally giving the lac, ammon, and ox, scillit. generally succeeded in abating it. I met with only three relapses, which appeared to proceed from the patients having imprudently exposed themselves to cold; the inflammatory symptoms and pain in the breast in one of them were worse than upon its first attack, but in the other two, confiderably flighter. I had no case where bleeding was necessary. far it is contagious I cannot decide; in some cases it has appeared clearly so, in others not so. I have met with it where at first only one person has been attacked with it, and it afterwards went through the whole family, in others where but one in a family had it, and where the others were equally exposed to infection as in the other cases. It more generally happened, however, that where it began

in a family, every member of it was affected more or less. The country around us is particularly flat, and the town itself nearly surrounded with water. The disease has appeared to come from the south, and proceeded north; we heard of the inhabitants of Lincoln and different parts of Lincolnshire being affected with it, previous to its being prevalent here.

# ARTICLE XXXIII.

From Mr. CROWTHER, of Halifax.

August 7, 1803.

According to your request, I shall here endeavour to give you some account of the first case that came under my care in the late prevailing Influenza, to which I shall subjoin fome remarks fince made; but had I been previously aware of this request, it is probable that my account had been more complete and fatisfactory.

The first case, then, that fell under my care was on the 8th of February last. A man about 40 years of age, of slender make, and apparently of a confumptive habit, was feized in the night with fickness, and difficult breathing, together with an excruciating headache, profuse sweating, quick pulse, a furred tongue, and a violent cough.—In the morning I was fent for, and found him as above described. Z 4

described.—I took from him 12 ounces of blood, gave him a cathartic, composed of decoction of senna, sal nitre and syrup scill. two table-spoonfuls, to be taken every two hours, until it operated, and at night a teaspoonful of the paregoric elixir, with an addition of tinct. opii, in a little water. On the 10th, found him much better, his fever abated, his cough fomething less, but inclined to vomit. I then gave him a gentle vomit of ipeca. which got up a large quantity of phlegm, and relieved his head very much; but did not quite remove his vomiting. On the 12th, gave him a faline mixture in a fermentive state, which put a stop to his vomiting, but brought on his cough more fevere; fo that he complained of a fickness in his breast, and great heat. I ordered him mutton-broths, and calves' feet jellies, and fuch like mucilaginous support, taking every other day a little of his purging mixture, as he found occasion. He then gradually recovered, only his cough continued till after he returned to his business. Recent experience has convinced me that to stop the cough in this complaint is almost destroying the patient. Refpecting

specting its height, it varied much in different constitutions. In persons of a weak habit, it was difficult to determine the precise time; the robust and strong in about eight or ten days. The disorder disappeared as the weather became warmer, but its influence is yet felt in many asthmatic constitutions, and those were the persons that have suffered most from it, and to which the disease has been most fatal. I cannot say the disease has been fatal when unconnected with other complaints. Old persons whose constitutions were broken with infirmities have been carried off by this disorder. The disorder has not been confined to either sex in particular.

Relapses were very frequently more severe, and with aged persons generally fatal in a short time.

The disorder generally affected the whole family in succession.

Upon inquiry I find that where the inhabitants reside under hills, sheltered from the east winds, they have escaped more generally, unless in some families where there is every reason to believe the disease was brought from another quarter; and on the other hand, hand, with persons residing on hills and exposed to all winds, the disease has been very prevalent and troublesome.

Such, Sir, is the account my memory enables me to give you, and hoping your candour will excuse its imperfections, as I was not previously aware of your request.

#### ARTICLE XXXIV.

From Mr. JEFFERSON, Pontefract.

JULY, 2, 1803.

Answers to queries.

- 1. Certainly, but milder in its effects, and not near so general in its attacks, as in other parts of the kingdom, as will appear by the following concise replies.
- 2. About the middle of January, and at first did not distinguish it from rheumatic fever.
- 4. I think I saw some slight cases having relation to it, so late as the middle of June.
- 5. Pain in the loins, and breast, the latter I believe was altogether muscular; judging so from the good effect of blisters.
- 6. Where several persons of the same family were affected, it was indiscriminately milder, or otherwise, some were confined to their beds for three or four days, while others continued to follow their daily occupations.

- 7. Not in this town or neighbourhood.
- 9. Old people with asthmas, or any other disorder of the chest. Of this description a few died.
- 10. If any difference, should take it to be the females.
- 11. Keeping up a diaphrocris with volatile alkali, camphor, &c. where plethora more prevailed, nitre was useful.
- 12. Did not bleed, found no great advantage in emetics,—when purgatives were wanted, thought calomel intitled to a preference. Seldom had reason to be pleased with the effects of opiates; sudorifics always beneficial; blisters never failed to produce all the good effects that could be desired.
  - 13. Broth, gruel, pudding, &c.
  - 14. Warm.
  - 15. By perspiration.
- 17. When relapses did occur, (which was not frequent) the symptoms were similar to the original attack.
- 18. Considering the shortness of the disease, convalescents were left in such a state of extreme debility, that their recovery was always slow.

20. Animal food, wine, porter, &c. &c.

22 and 23. Have no reason to think the Influenza highly contagious, if at all so; within four miles of this place, there is a pottery consisting of upwards of three hundred souls, they have daily intercourse with the town, and every other part of the country, yet not a single person of them has suffered from the disease.

25 and 26. Pontefract is a dry and elevated fituation, our prevailing winds in the spring are generally from the east, this year it seldom blew from that quarter, being chiefly confined (with the variation of a few points) to the N. W.

27. We heard of the epidemic, both north and fouth, often before it appeared.

## ARTICLE XXXV.

From Mr. JONATHAN BINNS.

Ackworth School, Nov. 11, 1803.

Though I may be able to communicate nothing, which may be deemed of much importance, on the subject of your circular letter, as total silence may be construed into disrespect for a respectable society, of which I have many years had the honour to be a member, I am desirous of contributing my mite towards your laudable intention.

What I have to relate will, I trust, throw some light on the question, whether the Influenza is, or is not, a contagious disease. My facts are of the negative kind, for I did not see a single case of the late epidemic; this I conjecture arose from the scarlatina anginosa being prevalent at the time in this samily, which spread such an alarm in this neighbourhood as to cut off almost all com-

munication, and from my having declined visiting, fince I settled here.

If the Influenza arose from the general state of the atmosphere, there is reason to suppose it must have been very general in this school, as there are few similar institutions in the island in which the air is ordinarily more freely admitted than in this, and during the prevalence of the scarlatina there was a more than ordinary attention to it; not only the school rooms and dining-rooms, but even the dormitories had, in general, the windows partly open both night and day; and in play hours the children are much out of doors, when the weather is not very unfavourable. At the time that the scarlatina existed here, the Influenza prevailed in the neighbouring towns, and I am informed by my friend Dr. Richardson, that it was very general at Wakefield, which lies only eight miles west of us, while the wind blew almost constantly from that quarter for several weeks; we must, therefore, have been exposed to the same kind of air, that the inhabitants of that town were, during that time, yet the Influenza did not attack a single individual of this family,

family, which, when the scarlatina broke out, consisted of 298 children, and about 35 officers and servants. Dr. R. further informs
me, that the singular fact of 300 having
escaped the disease at Ackworth school, urged
him to inquire if a similar circumstance happened at any other school; he adds, "I went
to Croston\*, where there are about 60 young
ladies, and was informed by Mrs. Wilson that
they all had escaped the Influenza. The disease attacked many families in the village of
Croston. The young ladies are pretty constantly in the open air, but had no communication with the people of the village."

I think it not probable that the Influenza was counteracted with us by the prevalence of the scarlatina, as there was always a confiderable number of the family free from it, though 170 had it in the course of four months; besides the sick, for the most part, were removed to a house at a distance; nor do I suppose that the sumigations we used,

<sup>\*</sup> Crofton is a village about four miles east of Wake-field, and therefore with a west wind, more immediately receives the air which blows from that town or neighbourhood.

which were insufficient to stop the progress of the scarlatina, could have prevented the Influenza; at Croston school, I believe, nothing was done, only care taken to prevent communication with the insected; hence I think it reasonable to conclude, that the late Insuenza did not depend merely on the general state of the air, but rather on contagion.

I hope my having been more than ordinarily engaged in attention to the scarlatina in this family, will be some apology for the lateness of this communication.

### ARTICLE XXXVI.

From Dr. OAKLY, of Mirfield, near Huddersfield.

June 1, 1803.

# GENTLEMEN,

Having for some years retired from the practice of physic, I can offer little in answer to your queries, from my own observation. However, I put your letter into the hands of Mr. Carr, an elderly gentleman, residing at Gommersall, three miles from this place, which situation is hereafter described. He is a man of a good natural understanding, cultivated by a good education and judicious reading; and in extensive practice, as a surgeon and apothecary. I will here set down his answers to several of your questions, according to the numbers in the printed letter, to save writing and circumlocution.

1. Yes: a disease much like a common cold, and at first mistaken for it, till becoming very

prevalent, it discovered itself to be an epidemical Influenza.

- 2. 米
- 3. About the end of May.
- 4.
- 5. Lassitude; pain of the head and back; foreness about the chest, with troublesome cough; laborious respiration and pyrexia.
- 6. The fymptoms are nearly the same in all patients.
  - 7. No.
  - 8.
- 9. It is more frequent in adults than children.

10.

- 11. Emetics, bleeding, blisters, nitrous aperients, mucilaginous pectorals.
- 12. Opiates were used very sparingly, and sudorifics but little. Bleeding and blisters were indicated by the urgency of the pain, and other symptoms of the chest.
  - 13. Antiphlogistic.
- \* When nothing is added to the number, Mr. Carr would not venture a decided answer for want of certainty; or the question is virtually answered, or made to require no answer by that to some other query.

- 14. Moderate cold.
- 15.
- 16.
- 17.
- 18. No, rather flowly.
- 19. In a state of considerable weakness.
- 20. The state of convalescence seemed to require no particular treatment.
  - 21. No such have appeared here.
- 22. Not contagious; as many instances have occurred of individuals in large families being attacked, while the rest remained free.
- 23. Schools feem to have escaped. Nothing particular has occurred in regard to manufactories.
  - 24. Few cases of this have occurred.
- 25. Gomersall, a village lying high in a hilly, cloth-manufacturing neighbourhood, about 8 miles from Leeds, Wakefield, Hudderssield and Halifax, and 6 from Bradford.
  - 26. Chiefly westerly.
- 27. We heard of the Influenza being in London and Bath before we saw any thing of it here: then it shewed itself at Leeds, from which place it came to us, probably by intercourse.

- 28. The spring has been fine, but rather droughty.
- 29. The wind seems to have had no influence on the progress of the disorder.
- 30. Yes: that which prevailed about 20 years ago, was very similar in every respect.
  - 31. No.
  - 32. None.

### ARTICLE XXXVII.

From SAMUEL ARGENT BARDSLEY, M.D. Physician to the Manchester Infirmary.

1. An epidemic catarrhal fever, or Influenza, appeared in Manchester as early as the first week in February; but it extended itself, for some weeks, in only a partial and confined degree; I met, however, with no instance of the disease, in either public or private practice, prior to the beginning of March; many other practitioners likewise assign this latter date as the period of its commencement; yet, I am able to state, on the unquestionable authority of my friend, Dr. Percival, that the disease manifested itself, in his own family, on the 4th of February; and from the best of his recollection, it occurred, in feveral cases, during the early part of that month. It does not, however, appear to have spread throughout all parts of the town, until the second week of March.

2. Answered above.

3. I find

- 3. I find it exerted its greatest influence between the 26th of March, and the 2d of April: this is evident from the number of patients, entered into the home-patient-book of the Infirmary, having exceeded in a four-fold proportion, that of any other week since the commencement of the year.
  - 4. It disappeared about the 26th of April.
- 5. The epidemic, in its genuine form, exhibited the following fymptoms: fpontaneous weariness and languor, succeeded by slight shiverings, with alternate flushings of heat, first attack the patient; he then complains of a deep-seated pain in the course of the frontal finuses, accompanied, for the most part, with fneezing, and a profuse discharge of lymph from the nose and eyes. In the space of a few hours, acute darting pains in the muscles fubservient to respiration, attended with a tickling cough and hoarfeness, frequently occur-as the disease advances, the patient complains of much anxiety about the præcordia, dull, aking pains in the back and kneejoints, and of great debility, languor, and depression of spirits. The pulse is small and quick; feldom, if ever, hard and full; the Aa4 tongue

tongue is covered with an extremely white mucus, and has the appearance of having been fuffuled with milk—the tongue being moist, little or no complaint is made of thirst.

—The appetite is not only entirely lost, but a fixed loathing to any solid food is expressed—on the 3d day, and sometimes as late as the 4th, the disease seems to have attained its acme.

6. The above description is only intended to apply to the genuine unmixed form of the epidemic. Modified by age, sex, and temperament, and (admitting it to be contagious) by the circumstances under which contagion was communicated, it exhibited a remarkable diversity in its effects, upon different subjects; yet in every case some degree of resemblance might be observed. Its distinctive character was never completely lost. In most delicate females, either sickness or diarrhæa, with transient shiverings and debility, unaccompanied with any catarrhal affection, formed the prominent symptoms of the disease.

In some the mucus membrane was but slightly inflamed; in others great pain and difficulty of breathing, with a sense of rawness and foreness in the trachea and cheft, indicated more extensive inflammation. Members of the same family were differently afflicted—some were solely affected with the almost pathognomonic symptoms of intense pain in the head, and general debility; others chiefly suffered from the catarrhal affection, attended with unusual languor, and derangement of the stomach and bowels.

- 7. I have not met with a fingle instance of its fatality, when unaccompanied with other diseases.
- 8. I caunot ascertain the proportion from my own experience; but I believe that not-withstanding its universality in this crowded and populous town, few have fallen victims to its severity. If I might hazard a conjecture, not more than one in two hundred have died of the genuine epidemic.
- 9. Female fervants were peculiarly liable to this disease; heads of families, and very young children form a comparative exception to its indiscriminate attack; but those who were most obnoxious to the complaint, and felt it most fatally and severely, were old, asthmatic, or otherwise debilitated subjects.

It would appear that puerperal women were highly predisposed to, and fatally afflicted, with this malady. One intelligent midwife lost five patients within ten days: and one puerperal patient died of the epidemic in our lying-in-hospital. This is so important a fact, and shews the necessity of strict seclution, from the risk of personal infection, in all puerperal cases, that it cannot be too generally promulgated.

- of the females, in those cases which were admitted into the House of Recovery; but, I believe, the majority was on the side of the females, if the slightest possible instances of the disease are to be taken into the account.
- 11. The medical treatment admitted of considerable variety; yet from its prevailing character of debility, the chief attention was directed to moderate the febrile symptoms, and to support the powers of life.

beneficial on the first attack; indeed the frequent occurrence of spontaneous nausea and sickness pointed out their use. To cleanse the primæ viæ, moderate doses of calomel,

with

with rhubarb and antimonial powders combined, were given, and repeated occasionally, with excellent effects. When much pain and foreness in the head and breast were felt, attended with a hot and dry skin, either pediluvia, or fomentations of the legs and feet with flannels wrung out of hot water, sensibly relieved the patient, by exciting a gentle moisture on the skin. To moderate the febrile symptoms, small doses of antimonial wine, combined with spir. æther. nitros. and aq. ammon. acetat. were almost invariably employed.

The local affection of the breast was in general subdued by the application of blisters; and even when the pain in the chest was severe and deep-seated, attended with impeded respiration and a teazing cough, this remedy scarcely ever failed in affording speedy relief. If an excruciating pain and consustion of the head, turgidity in the vessels of the eyes, and great impatience of light, indicated a more than usual determination of the blood to the brain; bleeding with leeches at the temples, and blistering the forehead and nape of the neck, were successfully put in practice.

Opiates

Opiates were feldom employed during the first stage of the disorder, as they had a tendency to exasperate the complaints of the head and chest, and increase restlessness and feverish heat. When the cough was incessant, and sharp wandering pains affected the breast and muscles subservient to respiration, attended with a rapid and somewhat hard pulse, the addition, in small doses, of the tincure of digitalis to the saline and diaphoretic medicines, already mentioned, not only mitigated the cough, but likewise promoted expectoration, and induced sleep. Oily medicines were neither useful, nor much relished by the sick.

The lancet was very feldom employed; in only two instances, it was deemed necessary to use general bleeding; and even topical depletion of the vessels was rarely advisable. To subdue the obstinate cough and copious expectoration of aged people, and those assisted with assistance and other pulmonic complaints, small combined doses of opium, digitalis and calomel, along with bark and other tonics, were generally employed. Tonic bitters, with the mineral acids, proved useful in checking

checking profuse discharges by the skin or lungs, and contributed likewise powerfully to restore the general health.

Wine, in gruel or whey, formed a power-ful auxiliary in supporting the strength, and preserving a moderate and equable moisture on the skin. It was found necessary, among the infirmary patients, to counteract febrile debility, after due evacuations of the stomach and intestines, by a light nutritious diet, and a moderate use of wine.

degree of temperature. The wards were duly ventilated, and any excess of heat or cold carefully guarded against. The patient was ordered to be kept in bed with a moderately slight covering; and his head and shoulders were considerably raised, until the giddiness and general debility were partly removed. He was then permitted to get out of bed, and only invited to lie down occasionally with his clothes on. But so great was the prostration of strength, in some cases (especially of semales) that sudden faintings ensued upon attempting to remove them from an horizontal posture.

Sometimes on the 3d, but more frequently on the 5th day, the feverish symptoms abated; yet great languor, and a cough more or less severe, but with freer expectoration, continued to molest the patient. A copious deposition in the urine, with a change from rather a pale and limpid hue, to a more natural colour, on the 4th or 5th day, denoted the diminution of the febrile symptoms. Moderate and easy perspiration, with copious, and somewhat bilious stools, greatly favoured the speedy termination of the more urgent symptoms of sever and pains in the back, head, and limbs.

16 and 17. Relapses do not appear to have been frequent. I have met with but few who suffered a repetition of the worst symptoms; and in these instances, the disease degenerated into typhus, and was with difficulty subdued.

18 and 19. The worst cases were discharged cured from the House of Recovery, in about an average period of 12 days; but many delicate persons, subject to pulmonary affections, lingered for weeks, under general debility, and a harassing cough.

- 20. See the method. medendi, number 12 and 13.
- 21. The epidemic seemed to be most frequently complicated with peripneumonia notha; and, in a very sew instances, with peripneumon. vera. It occasionally assumed the appearance of Cynanche Tonsillaris; and sometimes degenerated into typhus. In old people the peripneumonic symptoms proved fatal. Four or sive of the oldest inhabitants of the Poor-house (the youngest of them having passed 80) died of simple peripneumony.
- 22, 23, and 24. That the Influenza is a contagious disease, arising from a specific materies morbi, and readily communicable from one person to another, is rendered probable from various facts, as well as from its analogy to other contagious disorders. Its appearance here, although rapid, was progressive. It spread, like other insectious maladies, more particularly among those exposed, by their greater intercourse with each other, to the danger of contagion. Female domestics, and the inhabitants of the nursery, seldom escaped its influence. A gentleman of this town returned

turned from London, in the 3d week of May, while labouring under Influenza. He found his family, in the country, all well; and unconscious of the infectious nature of his complaint, he bestowed the usual caresses upon his children. Three of them fickened the next day, and two more on that following. The nurses of the House of Recovery fell sick, soon after the reception of the first cases of the malady, notwithstanding the usual preventive rules against infection were strictly followed. At Rochdale, I have been affured; the origin of the disease was distinctly traced to some gentlemen, who had brought it from Lancaster, where they had attended at the assizes. But the most complete and satisfactory evidence of the propagation of this difease by contagion, (I had almost said the only mode by which it is communicated,) is derived from what happened in the Manchester lunatic-hospital. None of the patients were afflicted with the epidemic, (although permitted to walk out daily in the airing grounds,) until the keeper and matron became affected. In consequence of their attention, while labouring under the Influenza, to some elderly patients,

patients, whose situation demanded more than common care, they communicated the infection to five of the persons thus circumstanced, while all the rest, to the amount of 80 and upwards, entirely escaped the complaint.—
The house-servants, who are solely engaged in domestic employments, and are never permitted to associate with the lunatics, suffered, more or less severely, by the disorder. Thus it would appear, that a careful exclusion from infected persons, is probably the most certain preventive method of obviating a malady so universally prevalent.

The appearance of the epidemic in manufactories and schools, was rapid, but progressive.

In children the fymptoms, after exposure to contagion, appeared rather earlier than in adults.

In my own family four adults were fuccessively attacked, after an interval, between each seizure, of two days.

25 and 26. The local circumstances of Manchester render it by no means an unhealthy situation. Its climate, though unplea-Vol. VI. B b sant,

fant, is not infalubrious.—It is fituated in the middle of a large plain, furrounded on the east and north by a chain of mountains; and open on the west to the Irish Channel.

This fituation exposes it to frequent rains; as the hills which form its line of separation from Yorkshire, arrest the clouds in their progress from the Atlantic Ocean. The annual quantity of rain which falls, at a medium, may be estimated at 33 inches. The most prevalent winds are from the south-west and north-east. The inhabitants, from their mode of living, are remarkably exempt from instammatory affections; and catarrhal sever is by no means of common occurrence. Typhus, under all its varieties, is the great scourge of the mass of the lower orders of the people.

27. I have not been able to procure fatis-factory information upon this head; but as far as my inquiries have gone, Manchester would seem to have been the centre, from whence the epidemic extended itself on all sides.—The great intercourse between this town and all the neighbourhood, no doubt contributed to its subsequent spread from the

former

former to the latter. The regular march of the epidemic has unquestionably been from south to north. When arrived here, however, it seemed to diverge, with tolerable equality, to all sides of the county.

28 and 29. It does not appear to have followed the direction of the wind; or, to have been, in the least, influenced in its progress by any sensible variation, either in the direction or temperature of the atmosphere. No season has been apparently less unfriendly to the human constitution than the whole of the late winter and early spring, in this part of the kingdom. This will appear from the following summary statement of the weather, since the year commenced.

January, till the 10th, mild and cloudy

February, from Jan. 10 to Feb. 12. uniform frost, without much intension or remission. Mostly fine and clear, with little snow.

After the 12th, showery weather, with gleams to the end of the month.

March, for 2 days heavy rain; from this to the middle of the month, frosty nights, but mild days, with little snow or rain; the

rest of the month rather warm for the season, and little rain.

April, till the 17th uncommonly fine and warm for the season, remarkably drying winds.

The barometer has been no way uncommon during the season; the winds have been principally north-east and south-west, as usual.

- 30. I cannot speak from my own experience to this point.
- 31. I have not been able to ascertain whether any epizootic complaint prevailed, either previously to, or during the prevalence of the disease. At least, none fell under my own observation; nor that of others, of whom I made inquiry.
- 32. I shall take the liberty of concluding this paper with a few desultory observations. Much diversity of opinion has prevailed concerning the nature and essential character of the disease. From my own observation of its prevailing symptoms in this place, I am disposed to consider it essentially a contagious febrile disease. The mucous membrane may be more or less diseased, and even active local

inflammation may occasionally prevail; but the former is not necessarily attended with general excitement; and the latter is only to be considered as an anomalous symptom dependant on peculiarity of constitution, or some other accidental circumstance. Great mischief will arise from confounding its occafional varieties with the permanent and specific character of the disease. Thus we learn from Sennertus\*, that in the epidemic catarrh of 1580 incalculable injury enfued, from partially confidering the local affection of the throat and breast, as indicating a disease of a purely inflammatory kind. He mentions the "Tuffis ficca, dolor pectoris, et præcipue septi transversi faucium asperitas, ventriculi languor, tandem gravis anhelitus," &c. as symptoms which induced many practitioners to make free use of the lancet, and with such mortal effects, that in the city of Rome alone, where bleeding was promifcuously employed, more than 2000 persons perished. Indeed, it may be laid down, as a medical axiom, that the constitutions of the

<sup>\*</sup> De Feb. lib. iv. cap. xviii.

B b 3 generality

generality of the inhabitants of populous and manufacturing towns, will not admit of debilitating remedies, in the same degree as may safely be put in practice among more temperate and more robust classes of people.

Manchester, June 11, 1803.

## ARTICLE XXXVIII.

From Mr. WILLIAM KNIPE, of Garstang.

- 1. Amongst the usual diseases of the spring, this town and neighbourhood was attacked by an epidemic, fimilar in appearance to catarrhus a contagione.
- 2. The first appearance of the complaint was about the first of April.
- 3. From the disorder being in different subjects, variously modified, the crisis was seldom regular; however, from my observations, the disease was generally at its acmè on the 5th or 6th day; when under a mild form, about the third or fourth day.
- 4. The complaint subsided about the latter part of May.
- 5. The most prominent symptoms were a fense of shivering, the patients complained of most violent head-ach, general aching in the back and limbs. The eyes appeared inflamed, the cough was from the beginning, dry and

troublesome, accompanied with soreness in the chest, tongue furred, thirst urgent, pulse frequent, yet not particularly inflammatory; the respiration difficult, in many instances the internal fauces were much inflamed and enlarged, attended with hoarseness.

- 6. The fymptoms were in general regular and uniform, yet in some individuals, they were so mild as scarcely to require confinement.
- 7. In no instance has any case in this neighbourhood proved fatal, unconnected with other disorders.
- 8. In my practice only one fatal case happened during the complaint; the patient was a young lady about fourteen, who had previously been much afflicted with pain in the head, she was on the third or fourth day seized with an epileptic fit, accompanied with dilated pupil, and every concomitant symptom of compressed brain, and died the day following.
- 9. The subjects most severely handled by the disorder were the old and puny; those who had formerly been subject to asthma, or pneumonic inflammation, or whose peculia-

rity of constitutions, gave them a liability to pulmonary consumption.

- in the first stage, so as to induce gentle vomiting, occasional aperients, sudorifics, pectoral and expectorant demulcents; when difficult respiration occurred, with tightness in the chest, venæsection and blisters to the breast, were had recourse to. This plan seemed most advantageous.
- 11. The most proper diet consisted in a strict attention to the antiphlogistic regimen.
- 12. Its common termination was by a gentle diaphoresis; in consumptive habits, the disorder frequently produced hæmoptysis, and purulent expectoration, accompanied with hectic fever.
- 13. The patients always felt most comfortable in a middling temperature. And the symptoms seemed exaggerated either from too warm, or too cold a room.
- 14. Several convalescents, through too early an exposure to cold, had relapses; the symptoms were much more severe than the first attack, and their recovery much retarded.

- 15. When in a state of recovery the patients complained of most violent head-ach; a frequent troublesome cough, and hoarseness; a sense of weakness in the lower extremities, with general debility, in consequence of which, they frequently fell victims to the intermittent fever.
- 16. The state of the country during the epidemic was extremely unhealthy. The scarlatina anginosa, rubeola, pertussis, were all uncommonly prevalent, they were, however, in few instances, fatal.
- 17. Without entering into any opinion, respecting the nature or source of contagion, shall merely say, I have no doubt but the Influenza was highly infectious.
- 18. In the different manufactories, the diforder was very predominant; whole families were visited by it, yet upon inquiry, found them attacked in succession, this in my opinion affords a striking proof of its being infectious; the intervals between the attack were various.
- 19. The wind during the first and second week of February, was almost confined to the north and north-west, sometimes, however,

it seemed to blow, for the course of a single day, from every quarter, during the latter part of the month south-west and north-west.

In the early part of March the wind was chiefly fouth-west and north-east, in the latter part south-west and north-west.

During the early part of April the wind was various, yet much from north and southwest; in the latter part of the month, chiefly from west and north-west.

- 20. Prior to the Influenza appearing here, I was informed that an epidemic was prevailing in Kendal and Lancaster, also that the town and neighbourhood of Liverpool suffered from a similar disorder.
- 21. You wish to be informed if any epizootic complaint prevailed here. I perfectly
  recollect that in the month of February last,
  a very fatal epidemic was predominant
  amongst the swine; in our town and neighbourhood, whole herds were swept off by it.

These are the only remarks I have to make upon the subject, they are, however, taken from practical facts. And should they be found of the smallest advantage, I shall think myself sufficiently rewarded.

# ARTICLE XXXIX.

From THOMAS HULL, M. D. Retford, Notting-hamshire.

In strict compliance with the request, contained in the printed queries issued by the Medical Society, for the purpose of more clearly ascertaining the nature of the disease, which has so widely and universally pervaded every part of the United Kingdom, indistinctively termed the Influenza, I feel myself called upon, as well in compliment, as in duty, to the public, to transmit you the sollowing replies, which I presume you will consider as nearly confined to the subject of the proposed queries, as the nature of them will admit.

The disease, now irrevocably denominated Influenza, made its appearance in this part of the county, about the 20th of March 1803, at which time, the atmosphere was subjected to great and sudden vicissitudes, attended by severe morning frosts, and sharp westerly winds.

winds. It evidently differed much from the usual diseases of the season; and was so novel in its appearance, as to require some ingenuity in adapting to it an appropriate name. As far as my notes and memorandums can inform me, the disease appeared to be, not only the most universal, but the most severe in its attack, about the middle of April, and from that time, gradually declining, left us about the end of the month of May.

Though pretty uniform as to the leading symptoms, its mode of attack varied considerably in some points, depending chiefly, if not altogether, on the difference in age, constitution, and temperament, of the persons affected.—Its commencement was ushered in, in the usual way, with alternations of heat and chilliness, attended by head-ach, sickness, a tickling and distressing cough, with shooting pains in the cheft, back, and loins, the pulse but slighly accelerated, of natural strength and foftness; a slight tendency to costiveness; with a white furred tongue. In the course of three or four days, all these symptoms gradually subsided, excepting the cough and pain in the cheft, which generally remained obsti-

nate for many days, and fornetimes weeks, afterwards—the languorand excessive debility, with depression of spirits, a loathing of all kinds of food, with a decided objection to almost all kinds of exercise, formed the latter stage of the disease; which in duration and extent varied confiderably in different individuals. Towards the close of the disease it evidently assumed (in many instances although not in all) an intermittent type, at which time the cough gradually abated, the expectoration became more free, and the sputa more confistent; such was the general appearance of the disease, as it occurred in my practice, nor were the modifications fo very numerous, as have been represented in other parts of the same county; in some instances, a hardness and swelling in the tonfils, and sublingual glands, attended by pain and difficult deglutition, was observed, and in a few instances, a smart attack of pneumonic or peripneumonic inflammation, which, however, was eafily removed by the application of a blifter. Allow me in this place, to observe what appeared to me so very extraordinary, as it occurred in so many instances, under the same general

type, and consequently shewing the identity of the disease, in every subject affected with it; notwithstanding the excessive languor and debility, with the most unhappy depression of spirits, that succeeded the first stage of the complaint, scarcely any perceptible difference in the state of the pulse could be observed. Instead of finding, as we should have naturally expected, an equal depression and sinking of the pulse, when every other symptom marked the excess of debility, the pulsations remained strong and powerful, not easily compressed, nor yet so full as to create any suspicion of internal inflammation.

This peculiarity of pulse was observable in and about Newark, to a considerable extent, and, in several instances in, and immediately in the neighbourhood of this town, where the complaint was attended with much severity.

When several members of the same family were affected at the same time with the disease, I could not discover any material deviation from the common mode of attack, excepting in those instances, where such a deviation may be ascribed to the difference

in the age and constitution of the persons attacked.

I have never witneffed a fingle instance of the complaint proving fatal, when unconnected with other diseases; nor, with the exception of three or four cases, has it been attended by any degree of fatality, within the sphere of my practice, or that of my medical neighbours.

Persons advanced in years, worn out in constitution, and shattered by previous disease, not only suffered the most severely, but proved the only martyrs to its attack. Females comprised by far the greater number of patients under my care.

The mode of treatment I universally purfued in the disease, was much the same as I employ in all cases of incipient sever; the use of emetics, and antimonial diaphoretics, which, independent of their specific effects, have generally the power of opening the bowels to a sufficient extent, I always had recourse to, in the first stage of the complaint; and these seldom failed to remove the symptoms of general sever.

Draughts composed of aq. ammon. acetat. mistur. camph. and vin. antimon. were always productive of much benefit; I seldom had occasion to employ either general or local bleeding: by way of relieving the cough, and dyspnæa, I had recourse to the application of a blister, and draughts composed of mist. camph. ether. vitriolic. and t. castor. taken three times in the day, which for this purpose appeared to me by far the most beneficial.

The distressing symptoms of the fecond stage, I sound in many instances, much more difficult of removal.—Bark, in all its forms, seemed, in many cases, not only of no advantage, but oftentimes prejudicial: the bowels were thrown into inordinate action, and the languor and debility much increased, by the too powerful purgings, occasioned by its use; in this stage, I experienced nothing more beneficial, than a due perseverance in the following draught.

R. Infus. Cort. Cascarill. 3vi.
Mistur. Camphorat. 3ss.
T. Rhei spirituos. 3i.
Acid. Vitriol. dilut. gt. vj. M. siat haustus, ter die sumendus.

Vol. VI. Cc A light,

A light, easy, and sufficiently nutritive diet, was at all times of great use; while a full, strong, and rich diet, seemed rather to retard, than hasten a cure.

Relapses in this part of the county, were very common; though in general, not exceeding, in severity or duration, the primary attack.

The recovery from convalescence was, in general, very expeditious; yet in those, who did recover so very expeditiously, I think I could discover a proportionate propensity to a relapse.

The disorders which appeared to combine with the epidemic, were the febris pneumonica of Hossman II. 136, and the peripneumonia notha of Sydenham, Sect. 6. Cap. 4. the former of which required a strict attendance to the antiphlogistic system, while the latter was always relieved by the use of blisters, preparations of squill opium, and colomel given in small doses.

In answer to your 22d query, I shall briefly give you my decided opinion that the Influenza, or the disease so called, was contagious in this country. The facts on which I have grounded

grounded my opinion, were observed by me with much care, and were furnished by my own practice. The general prevalence of the disease; the identity of it, in every instance where it has affected branches of families, corresponding in age, constitution and temperament; the flight deviations from the regular mode of aggression, as well as in its progress, even in persons advanced in life, and of different constitutions; its having run through particular families, without allowing a fingle individual to escape; and its ready communication from one family to another, where but little intercourse existed, point out to me some of the strongest facts in favour of the opinion I have so decidedly maintained.-It would be occupying more space, than the extent of my paper would admit of, were I to make any comments on the above: I shall therefore leave it for the present.

The town, as well as the country about Retford, is certainly to be considered as one of the most healthy in the kingdom. It is situated about 144 miles on the high road from London to York, contains, with the connected parishes of West Retford and Claracter C c 2 bro',

bro', about 3000 inhabitants; its atmofphere is not loaded, or corrupted by any noxious effluvia from marshes, fens, or manufactories; it stands exposed to the west, to an extensive plain of about 25 miles, part of which, now inclosed, formerly occupied a considerable share of Sherwood Forest; and the river Idle passes nearly through the center; it stands the most exposed to the north and west winds.

The town of Retford, is situated north of Newark on Trent, 20 miles, and south of Doncaster 18 miles.

The epidemic appeared in and about New-ark, three weeks, before we had the slightest experience of it; and passing by us, in some direction or other, Doncaster was affected with it, near a fortnight before us; now this appears to me a circumstance not easily to be accounted for, as the general course of the epidemic was from the south: this, however is a circumstance, which I have several times before noticed, in the case of other contagious epidemics, particularly the scarlatina and small-pox: whether it be confined to diseases, purely contagious, or not, I have not been able to

ascertain, yet it appears to me entitled to some consideration; for if we are to consider the introduction of these three distinct complaints into this neighbourhood, attended by similar circumstances, evidently not depending entirely on the course of the winds; why are we not intitled to consider them as connected in some other respects, analogous at least, so far as relates to the pecularities in their origin, propagation, and extent?

Retford, July 1893.

# ARTICLE XL.

From Mr. BISHOP, of Leicester.

JULY 15, 1803.

# Query.

- 1. A peculiar catarrhal epidemic appeared in this town and neighbourhood, during the last spring.
- 2. Between the 15th and 20th of February.
  - 3. About the 10th of April.
  - 4. About the 25th of May.
- 5. The most urgent effects of the disease consisted in disturbance of the vital sunctions; respiration was for the most part considerably impeded, accompanied with a good deal of pyrexia.
- 7. Those only died under the immediate influence of the disease, who had usually been subject to winter cough.

- 8. Of those whom I saw, not above one in about 26 died, as specified in the reply to query 7.—These were persons beyond their meridian.
- 9. Those who had previously been subject to frequent inflammatory attacks upon the lungs suffered most severely; the aged of those who perished, died of perip. notha.

Many in early life, (chiefly between 20 and 40 years), were much haraffed with a dry, painful cough, together with a good deal of conftriction about the præcordia, and general inflammation; in feveral hæmoptoe enfued, inducing a rapid phthifis.—Where the disease was very urgent the patient generally complained of acute head-ach, and was occasionally, especially during the night, somewhat delirious; at other times, in a few instances, a certain degree of stupor took place. I saw but very sew under the age of 16 who had the disease.

- 10. Of the cases to which I was called full four-fifths were females.
- ed long and severely of acute fugitive pains in the intercostal, pectoral, and abdominal Cc4 muscles:

muscles: in a few the seat of similar pains was referred to the liver, attended with uneasiness at the summit of the shoulder or clavicle.—Several had severe pains in the muscular parts of the limbs. Many were very apt to be irregular in their bowels, being at one time laxative, at another constipated. In the young and phlogistic habit the disorder betrayed marks more or less characteristic of thoracic inflammation; numbers of whom probably suffered extensive adhesions of the pleura, judging from the seat and fixity of the pains.

Those who appeared to labour under phleg-monic inflammation of the chest, in whom recourse was had to general blood-letting in the first instance, pulse being hard, frequent and oppressed, the evacuation was of considerable advantage, in relieving the chest, and abating the hardness of the pulse. In one example of this description, in a plethoric woman, aged 45, there was so much pain on one side of the breast, accompanied with hard, hoarse, dry cough, accelerated and dissidult respiration, hard, frequent but strong pulse, that I took away 3xij. of blood from

the arm, by which the acute pain was much relieved, as well as the dyspnæa, and the patient recovered well with the aid of blifters, expectorants and pediluvium; but the evacuation undoubtedly lowered this patient much more than it had wont to do on former occasions. The blood here was covered by a pretty thick crust, which was a good deal cupped, the coagulum firm and tough. Another female, aged 46-subject to frequent pneumonic attacks, during the progress of the Influenza was seized with severe pleuritic affection, inceffant cough, without expectoration, pulse very hard, about 90.-The patient averse to topical bleeding, I took from the arm 3vj. of blood, in the first week of the disease. The blood was very fizy; she had a better night after this evacuation, and appeared to be much more comfortable the next morning; -the same symptoms recurring, with unabated feverity, in less than 24 hours afterwards, I repeated the evacuation of blood to the same quantity as before. The most urgent symptoms were again relieved, and on giving the fquill and ammoniacal gum, together with a blifter to the cheft, copious

expectoration ensued; and I had flattered myself that my patient would have recovered: but, unwilling longer to adhere to simple diluents, and feeling debilitated and languid, the hastily drank half a pint of red Port wine, in one morning; this increased the urgency of all the symptoms, suppressing altogether the expectoration. Another practitioner was called in, who, in lieu of the former medicines, gave her ammonia, and the patient made a speedy exit. Mr. Paget, a very respectable surgeon of this place, met with several instances of Instuenza, in which venesection was eminently useful. No doubt but that this remedy (venesection) has been misapplied in the treatment of this as well as of other pectoral diseases, and never with impunity. Whenever I made trial of topical bleeding, I found it nearly as efficacious as general blood-letting. Oleous medicines in general were ungrateful to the stomach. The patients did not usually bear purgatives well. -Blisters were particularly serviceable in relieving topical pain and dyspnœa. - Relaxants did not answer so well as they usually do in ordinary catarrh; ipecacuanha appeared to be be a more useful and agreeable medicine than antimony, as a relaxant.—Pediluvium was often very useful, especially when used about the time of the accession of the natural evening paroxysm.—The inspissated juice of the poppy, in the dose of a scruple, proved a pleasant anodyne at night, after the instammatory excitement had abated. I never exhibited an emetic.—The squill and g. ammoniacum; the kali limoniatum combined with oxymel scillæ, were extremely useful.

- 13. I employed no other diet than the farinacea, toast and water, barley water, milk, coffee.
- 16. Relapses frequent, more especially in those subjected to copious perspiration.
- 17. Relapses induced suppression of the expectoration, increase of dyspnæa, head-ach, heat and dryness of skin, with frequent rheumatic pains of the loins, and extremities; head-ach was never excessively violent in any of the instances which fell under my observation; scarcely any were altogether free from it, and many were disposed to refer it to want of rest.

- 18. Convalescents recovered in general very slowly, excepting the young, who had not the disease with much violence.
- 19. Several of those who were predisposed to phthis pulmonalis, although pertectly free from any of its appearances at the time they were seized with the Influenza, had this tendency so much aroused by it, that a tickling cough continuing, or, frequent attacks of hoarseness, occurring with little cough at first, but increasing afterwards, induced purulent spitting, terminating fatally in about 5 or 6 months.
- 22. I have not formed a decisive opinion on this head.
- 24. In many families two or three were affected with the disease; generally, at first, one only; but perhaps never the whole family. This report applies also to quære 23d.
- 31. No epizootic complaint reigned here during the prevalence of the Influenza.

I have omitted, by accident, I perceive, to remark above, that together with cough and hoarseness, many of the younger or middle aged patients had more or less inflammation of the mucus membrane of the fauces; in a few instances suppuration took place in one or both tonsils; in others, it attacked also the eustachian tube and ear, and then formed a very unpleasant part of the disease, producing temporary tinnitus and deasness.

#### ARTICLE XLI.

From Mr. H. SWAN, Surgeon, &c. Lincoln.

We had a great many patients affected with the late epidemical disorder called Influenza, which differed from the usual diseases of the season. It began here on the 15th February, but I had not many patients until the 11th of March when the number increased very rapidly, and on the 25th it seemed to be at its greatest height, and continued in this state several days, when it began gradually to decline, and from the 26th of April, I had no fresh patients. They generally began with a shivering, a discharge from the nose, and other fymptoms of catarrh. They complained of universal uneasiness, and when they were asked what part was most affected, they faid they could not tell, for they had not a free spot about them. They complained of a foreness down the cheft, and had an incesfant cough, particularly when in a recumbent

bent posture, but more so during the night, and some had a slight inflammation of the membranes of the throat. The pulle was quick and low, but not hard, excepting in some of strong habits. In old people there was a great degree of irregularity in the pulse. The fweat in a night poured from them very profufely, more I think than happens at the end of an ague fit; and this was the case with those who took no medicine, as well as those who took fudorifies. The cheft was for the most part affected, but this was not always the case, as one gentleman's family north of Lincoln had all the usual fymptoms except the cough, and they all had fore throats. I did not find that the symptoms varied much in different individuals, or in the different fexes, unless in certain degrees of violence. It was not fatal when unconnected with other complaints, as I do not remember to have lost a single patient who had not some previous affection of the chest. The proportion of fatality in my practice was very small, as it did not exceed one in forty. I did not find that it was confined to any ages, classes, or constitutions; as children, farmers, servants

of strong habit, those of the middle age, and debilitated frames, as well as old people were affected by it. I think that old people, when affected, suffered most under the disease, but they and young children were not so liable to it. Both sexes were affected pretty equally. Antimonials at the first abated the fever, and I think had the best effect when they operated gently by an emetic and purgative. The body was kept open by the kal. tartarisat. and other gentle aperients. I bled very few, and those who were bled could not bear a repetition of the operation. I had not many cases which required local bleeding. Gentle emetics did good in many cases. I did not use strong purgatives, as the symptoms of debility were so great. Opiates did much good, and were given pretty generally when no inflammatory or other symptom indicated their use. They quieted the cough, and abated many of the other fymptoms. The perspiration, when no sudorisic was given, was very profuse, but not critical. Blisters were applied, in some cases where the chest was much oppressed, with advantage. At first I gave salines, but as expectoration feemed to afford relief, when the

the first symptoms were abated. I gave the gum ammon. with ammon. pta., and a decoction of feneka, which I found useful, particularly in old people. The diet which I directed, confisted of broth, fago, gruel, and fuch things, with or without wine, as circumstances required; but after the violent symptoms abated, the most of them required wine. We had fome very warm weather for the feason, when the disease was about its height; and it disappeared at a time when the weather was much colder. A moderate temperature seemed the most favourable. The fever very often abated in a few days, but the cough went off gradually, and generally by expectoration. Many had relapses, but the fymptoms varied little from the original attack, and I think they were less severe. Some convalescents recovered fast, but most very flowly; and some even now complain that they have never recovered their strength. Some had inflammations upon the lower extremities, and one woman had many inflammatory circumscribed tumors upon her legs, which formed floughs, and produced confiderable ulcers, which are not yet healed. Dd When VOL. VI.

When the expectoration became free, I gave bark, bitters fometimes with, and fometimes without volatiles, and other cordial tonic medicines. I allowed them animal food in moderation, milk and vegetables, and fome had affes' milk. I cannot say positively that it was contagious, but in many cases I suspected it was, as feveral-had escaped to nearly the time when it left us, and received the disease after some infected persons came to the houses where they resided. But the disease was not general in the same house, as many escaped; and in many inflances I have known that feveral fell ill on the same day, without having had any communication with infected people, I mean those labouring under the epidemic. No particular concomitant diforder, in my practice, seemed to combine with the Influenza. I attended two ladies' boarding-schools, and one for boys, but nothing particular happened in them. A considerable part of Lincoln is situated upon a hill, but by much the largest part is on the fide of it, and in a valley exposed to all the winds, excepting the lower part of it, which is defended by the hill from the north; but I did

did not find that one part of the town was more affected than the other; and I cannot learn in what direction it came to this place. Nor did I find that the progress of the disease depended upon the direction of the winds.

Lincoln, July 11, 1803.

## ARTICLE XLII.

From Mr. JOHN WHATELY, Burton on Trent.

August, 10, 1803.

There has appeared no difease in this town, or its vicinity, the last spring, that materially differed from the diforders usually prevalent at that feafon.—The report of a contagious catarrh, or Influenza, existing in various parts of the kingdom, called forth my greatest attention; and about the end of April, I met with a few instances of catarrh, in which the febrile symptoms were for a day or two severe, especially the pain of the head and back, but there was not the least shadow of possibility for my supposing them to arise from human contagion; and the whole was probably merely accidental.—The cases of pneumonia that came under my treatment, were perhaps fewer than usual, but I thought bleeding in them of less service, and my patients recovered

recovered flowly. For many months the scarlatina had been pretty prevalent with us, in the mildest form, and attacking chiefly semale children: the instances of severe disease that occurred to me could all be traced to contagion received from places where it was more violent and satal. The hooping cough and measses were both common the last spring, but uniformly savourable.

Burton on Trent has a low but dry fituation. The river runs rapidly in a northwardly direction upon a gravel bottom; by actual admeasurement it is only 90 feet above high water mark, and there is no stagnant water. On the east and west are high lands, but where the situation was more elevated, I have met with no greater tendency to complaints. From the geological form of the country, the prevailing winds will naturally seem from the northward.

### ARTICLE XLIII.

From Mr. TREVOR JONES, Litchfield.

JANUARY 26, 1804.

- 1. Early last spring an epidemical catarrh, commonly called the Influenza, spread all over the midland counties;
- 2. And appeared in this neighbourhood about the tenth of March.
- 3. Was at its greatest height about the beginning of April, and
- 4. Disappeared about the end of that month, or beginning of May.
- 5. The fymptoms that usually attended were chilliness, lassitude, weariness, and aking of the extremities; sneezing, great soreness and pain under the sternum, which were much aggravated by coughing, and a frequent pulse.
- 6. The symptoms varied little in either sex, but from the peculiar idiosyncracy of the individual, from advanced age, or from previous debility.

7. In

- 7. In no instance did it prove fatal when unconnected with other diseases;
- 8. But in advanced age it sometimes terminated in peripneumonia notha, and death.
- 9. It prevailed so generally that no particular age, or class was exempted; but those previously disposed to catarrhal or pneumonic affections, had it most severely.
- 10. It did not appear to affect one fex more than the other.
- was, in the early stage of the disease, to give small doses of calomel and rhubarb every night, neutral salts, saline draughts periodically, and constant dilution with tepid barley water, with gum arabic dissolved in it. To relieve dyspnæa, and promote expectoration in the second stage, or when the soreness and pain under the sternum, &c. were abated, I ordered lac ammoniacum, and tinctura scillæ. When a copious expectoration, in a more advanced period, and incessant cough prevailed, tincture of digitalis, and tincture of opium hardly ever failed in removing them.

Dd 4.

12. I had

- 12. I had feldom occasion to advise bleeding, emetics, or blistering, and only in those subject to pneumonic inflammation.
- 13. While the oppressive fymptoms in the beginning continued, an aqueous diet answered best, which was gradually changed, according to their abatement; and frequently a full diet, with wine, was allowed, with manifest benefit.
- 14. The temperature of the chamber was advised to be about 60° of Fahreinheit's thermometer.
- 15. The termination of the disease was generally attended with a copious puriform expectoration.
  - 16. Some persons had frequent relapses,
- 17. But not attended with pain, fever, &c. as at the first attack;
- 18. Hence it will appear that convalescents did not always recover speedily, though they did in general.
- 19. Sometimes much languor and debility remained.
- 20. Convalescence was promoted by bark and myrrh, by opium, by digitalis, by air, and exercise.

- 21. Some individuals had diarrhæa foon after they were attacked with Influenza. I did not perceive any other concomitant diforder, and it was never severe.
- 22. I could not ascertain that it was contagious.
- 23. Having no large "collections" of people, I can give no answer to this question.
- 24. Two, three, and more persons in the same house were affected, at or very nearly the same time. In other instances several days elapsed between the seizures.
- 25. Litchfield stands mostly in a valley, through which a brook runs; is built of brick upon a friable red rock; is subject to no particular disease, and is esteemed remarkably healthy. Upon a strict inquiry I made several years ago, it appeared, upon an average of ten years, that the deaths were one in forty-six.

The water is excellent, conveyed from the neighbouring hills, by leaden pipes.

26. The fouth-west, and the north-east winds have most effect, by passing along the valley.

- 27. I could not learn that there was much difference in the time of the Influenza appearing in Litchfield, and the neighbouring towns; but I believe that it began at Birmingham, S. S. W. of Litchfield first, and at Stafford after it had appeared in Litchfield.
- 28. I made no meteorological remarks, but I was informed that near the western coast, fresh meat became tainted in much less time, during the prevalence of the Influenza, than usual.
- 29. I cannot discover that the progress of the disease followed the direction of the wind.
- 31. No particular complaint was observed, previous to, or during the time the disease prevailed.

#### ARTICLE XLIV.

From Mr. GREGORY HICKMAN, Burslem, Staffordshire.

JULY 3, 1803.

Queries-Answers.

- 1. A catarrhal fever, with inflammation of the throat, trachea, and bronchia.
  - 2. About the beginning of March 1803.
  - 3. April 1803.
  - 4. Beginning of May-same year.
- 5. All the fymptoms of catarrh; with often, much dyspnæa, and sometimes the kind of wheezing observable in the croup, with sore throat; and often pain in the bowels, with constipation.
- 6. The symptoms pretty uniform, but varying in degree.
  - 7 and 8. Very feldom.
  - 9. Mostly grown up young people.
  - 10. Rather most females.
  - 11. Early emetics, blisters, and purges with

with calomel and rhubarb, in pretty full doses, generally proved successful.

- 12. I never saw a case where the pulse would admit the use of the lancet; and blisters I preferred to topical bleeding.
- 13. Barley water, milk and water, linseed tea; with imperial for common drink.
- 14. A moderate temperature was found best.
- 15. Sometimes an expectoration, but generally a gradual subsidence of the several symptoms, without any regular criss.
  - 16. They did sometimes happen.
- 17. The catarrhal symptoms much less distinct; disease resembled an attack of slow continued sever; and even, in a sew instances, resembling typhus.
- 18. Where the disease was taken early, a single emetic, and subsequent dose of calomel and rhubarb, was often found sufficient for a cure; but on the contrary, the disease was often violent, and then the recovery extremely slow.
- 19. A state of debility, more than commensurate to the violence, or duration of the disease.

- 20. Nutritious diet, a little wine or porter, and when the tongue is become perfectly clear and moist, yellow Peruvian bark.
- 21. Almost every occasional disorder, did more or less, assume the character of this, as is usual of other epidemics.
- 22. Not contagious; those exposed to its effluvia often escaped; while those apparently insulated, were often affected.
- 23. This place is the centre of that highly peopled district, the Staffordshire potteries, and I did not observe the disease to run through particular manufactories.
- 24. Sometimes two together; at others, at intervals, without any remarkable regularity of interval.
- 25. Remarkably high ground, diverlified with hill and dale, but very little wood. Air strongly impregnated with sulphuric, and sometimes, marine acids, from the vast quantity of burning suel \*; and the use of common salt in some branches of manufacture.
  - 26. W. N. W. nine months in the year.

<sup>\*</sup> The coal is loaded with pyrites.

- 27. The progress seemed to be from S.E. by S. to the opposite points: I did not remark that it arose from intercourse.
- 28. During last winter and spring, less snow, or fall of any kind happened, than has been known of many years.
- 29. During the existence of the disease, the wind varied between N. E. and W., but was never long stationary.
- 30. I very imperfectly remember the epidemic of 1782.
- I do not recollect any; but the previous year many horses died, of what the farriers termed the mad staggers; but, which upon dissection, appeared to be occasioned by an inflammation of the lungs, and substance of the heart, proving fatal in 36 hours; and within these sew weeks, this has re appeared; but less frequent, and infinitely milder.
- analogy to that described by Sydenham as prevailing in 1675, which he called "epidemic cough," &c. It is remarkable, that numbers who have been afflicted with the late Influenza, have suffered from a very obstinate influenza, have suffered from a very obstinate influenza,

flammation of the tarsi of the eyelids, which ultimately extends to the tunica conjunctiva, and then becomes very painful.—Upon the whole, however, this country has suffered very little; the disease has almost always readily yielded to mild emetics, mercurial purges, and blisters.

#### ARTICLE XLV.

KETLEY, Shropshire.

JUNE, 28, 1803.

# "GENTLEMEN,

"Pursuant to your request, I have sent such answers to the questions contained in your printed letter, respecting the late epidemic disorder, as my experience enables me to do, having myself suffered severely by three relapses of that dreadful malady.

"I am, gentlemen, yours respectfully,

" J. EVANS."

Answers to queries.

- 1. The disorder commonly called Influenza.
- 2. The latter end of February.
- 3. From the middle of March to the last week in April.
- 4. It gradually disappeared by the first week in June.
- 5. Pain in the head, back, and limbs, extreme debility, fever attended with costiveness,

loss

loss of appetite, and a total want of rest, which produced a great degree of irritability. Many persons were deprived of both smell and taste, and were seized with a most severe pain in the side. The urine, during the beight of the disease, deposited a pink coloured sediment; and on the decline of it, several lost their hearing of one, or both ears. An entire deasness of the right ear, for the space of a fortnight, was cured in three days by electricity. A violent cough, with a very copious expectoration, frequently attended the disease throughout. Some sew had a spasmodic affection of the throat, with a sensation of choaking; and several were hoarse.

- 6. The fymptoms varied much in different individuals.
- 9. Aged and infirm persons, and those who had been hard drinkers.
- 11. On the first attack of the disease, emetics, mercurial purgatives, and diaphoretics, frequently put a stop to the progress of it.
- in general, bleeding was only recommended in a few cases where the pain in the side was violent; but was not attended with any ap-Vol. VI.

parent advantage. Blistering the part affected always afforded considerable relief. Opiates alone, or joined with camphor, in many cases did not procure rest; but the following embrocation never failed in procuring a most comfortable night's sleep. R. tinct. opii. spir. ammon. c. linim. sapon. c. a zij. m. The whole of this was rubbed into the back and sides of the patient at bed time. Spasms in the throat, and a dejection of spirits were generally relieved by ether.

- 13. Broth, tea, coffee, chocolate, milk, and water gruel. As a beverage, soda water, toast and water, balm tea, &c.—Oranges proved very grateful to most people, but wine was too heating in general, except cowslip, which was an agreeable cordial at bed time. The taste of malt liquor was extremely disagreeable to many.
  - 14. A moderate temperature.
- 15. A gradual diminution of all the symptoms of the disorder. The cough continued the longest; and some few cases put on the form of slight intermittents.
- 16. Relapses were very frequent on expofure to cold, and considerably more severe than

than the original attack, attended with intolerable stitches in the side and breast.

- 18. Convalescents recovered very slowly; on the cough ceasing, some had a red, rough, itching, rash, all over them.
- 19. They were left in a state of the greatest debility.
- to me to be contagious.—Three of my own family were severely affected for some weeks; but two servants, who constantly attended on them, remained free from infection. A shopkeeper's family in this place was also not infected, although there was a continual refort of invalids to the shop. At a brewery carried on in these extensive iron works, for the use of the workmen, not one of the samily who have the management of it had the disorder, although many infected persons frequented the house daily.
- 23. The workmen were mostly attacked in classes. The labourers being more exposed to cold, were first infected. The men employed in the furnaces were next seized with the disorder. Out of forty, who worked at

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what is called the Puddling \*, twenty were infected in the course of sour days. The remainder of the forty were, many of them, very slightly infected, and a few not at all.

- 24. Many were affected in the same house at the same period, and in some families only a few; the remainder entirely escaping the infection.
  - 25. Both low and elevated.
- 26. The north, and north-easterly winds prevailed for several weeks; but from the 26th of March to the 12th of April, the weather was remarkably warm; after that time it became extremely cold again.
- 29. The progress of the disease did not appear to follow the direction of the wind. The village of Kinnersley, six miles north of this situation, was not infected till a fortnight after it made its appearance in this place.
- 30. I recollect former Influenzas, which I think were less severe in their attacks, and of a shorter duration; also, that relapses were by no means so frequent.
- \* The Puddling is a particular process for the manufacturing of iron, where the heat is so intense, that the men work naked, having only linen trousers on-

#### ARTICLE XLVI.

Shrewsbury, June 9, 1803.

## " GENTLEMEN,

- observations to the Medical Society. My friend Dr. Darwin put your letter to him into my hand, in consequence of my having made this disease an object of particular attention.
  - " I have the honour of being
    - "Gentlemen, your most obedient servant,
      "THOMAS DUGARD."
  - I. The Influenza.
- 2. On the 20th of February in a boy at the public school. I did not see it again till the third of March, when it appeared in the same school.
- 3. About the time of the Shrewsbury Lent assizes, (March 20th) the weather was then unseasonably hot.
- 4. But few cases of Influenza occurred in Shrewsbury after the 20th of April.

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5. The

5. The disease generally commenced with chilly and hot sits, head-ach, desluxion from the nose and eyes, pain in the chest, back, and limbs, quick pulse, parched skin, dry, white tongue, vomiting, and sometimes costiveness. The cough then succeeded with increased secretion of mucus, dissiculty of breathing, and dejection of spirits. The affection of the head sometimes amounted to delirium. The tongue remained long white; and the difficulty of breathing was often very urgent.

The symptoms took the intire range of peripneumony, and spurious peripneumony, the characteristic symptom being an inordinate prostration of strength.

- 6. The symptoms differed much in different members of the same family.
- 7. The disease has not proved fatal in any instance that I recollect, where unconnected with a previous disease, or enseebled habit.
  - S. About one in forty.
- 9. All classes and constitutions were obnoxious to the disease, adults more so than children, and amongst the old it was most severe and fatal.

- 10. Both fexes the fame.
- regulated by the variations of the fymptoms. In general a vomit, calomel, and small doses of antimony: when the difficulty of breathing became great, accompanied with hard pulse, bleeding was very useful, and in some instances I have been under a necessity of repeating it; blisters were of service, but I found inflaming the skin with mustard preferable for allaying the pain in the chest, as the application could be repeated as often as the oppression at the præcordia was considerable.
  - 13. In the beginning the antiphlogistic regimen.
  - 14. I generally kept those patients, who were worst at the commencement of the attack, in bed, for two or three days, being the most convenient method of keeping them temperate. The temperature of the apartment was recommended to be rather below than above 60.
  - 15. It terminated generally with a cough and debility.

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16 and

16 and 17. Relapses were frequent, but generally less severe; sometimes it assumed an intermittent form, appearing worse every other day, or every third day.

18. No.

- 19. With debility and incapacity for doing their business with the usual facility.
- 20. Gentle exercise in a carriage, or on horseback.
- 22 and 23. In my opinion the Influenza was contagious, as is evinced by the circumstance of the two schools, which I communicated to Dr. Beddoes, and Dr. Pearson.
- 24. In the inftance of schools many of the children were seized at the same time, where they had free communication with the inhabitants of the town. In private families the Influenza generally appeared in succession; this was also the case in villages, in our county jail, the Infirmary, and other public institutions, where there was not much promiseuous communication.
- 25. Shrewsbury is situated high, almost surrounded by the Severn, and meadow land without

without marshes. I did not perceive the situation to have any connection with the complaint.

- 26. The wind here, on the 20th of February, was N. by W. March the 3d,4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, N.W., N.W., S., N.W., N., N.E., N.E., N. by E., N., N., N.W., W., N., N., W., W., W., a fresh breeze. The 19th, 20th, 21st, 22d, 23d, 24th, 25th, 26th, 27th, when the disorder was at the height, the wind was S.W., N., E., S., S.W., S.E., S.E., S.E., S.W., then continued westerly. The height of my thermometer, in the open air, on a northern wall in the shade, ranged in this time, (viz. from the 19th to the 27th) from 56 to 66 at noon, except two days, when it was 51 and 53.
- 27. First in Shrewsbury, then into the market towns, and villages around it, latest in Wales; and I have no doubt, but the disorder is conveyed from place to place. Vide Letters to Drs. Beddoes and Pearson.
- 28. If the Society think it worth while, I can furnish them with a correct statement of the weather, and thermometer.

29. Ludlow lies nearly S. from Shrewsbury; the disorder appeared there the 27 or 28 of March, therefore could not have been conveyed by the wind, as at that time it was here in a southern point.

30.

- 31. Horses, dogs, and cats, were disordered in this town, and in great part of the county, with symptoms similar to the Influenza; many dogs were killed as mad dogs, which were not hydrophobic.
- 32. In some of the bad cases the countenance and extremities were livid for several days; the first time I saw this state of the disease, I concluded the patient was in articulo mortis, but finding afterwards that this was not the case, I supposed it to proceed from a desicient oxygenation of the blood, which may perhaps also account for the prostration of strength that characterizes this complaint from common pneumonic affections, attended with an equal urgency of other symptoms. In many cases there was a disagreeable saccharine odour in the breath, which remained for weeks. I do not recollect, in my whole experience, having seen

feen so many cases of patients past 75 years of age, with hot dry skin, hard quick pulse, and other symptoms of high febrile action; as I met with in one fortnight, while this complaint was at its height.

#### ARTICLE XLVII.

From Mr. EDWARD JONES, Montgomery.

June 25, 1803.

- r. An epidemical disorder, more generally prevalent than any within the memory of man, made its appearance in this neighbourhood this spring.
- 2. It first shewed itself about the 14th March.
- 3. Was at its greatest height from 23d March to 1st April.
- 4. Did not totally disappear till towards the latter end of April, though it evidently declined from the commencement of the month.
- 5. Its most prominent symptom was great prostration of strength, in proportion to the degree of fever; in some cases of robust young people, great determination to the head, with delirium, came on.
- 6. The symptoms varied much according to the age, constitution, and previous complaints

plaints of individuals. I did not observe any remarkable coincidence in members of the same families.

7. A fatal instance has not come to my knowledge.

8.

- 9. The young and plethoric amongst the lower classes had the most severe symptoms, but the recovery of the aged and infirm was longer protracted; there were very sew of any class that escaped altogether.
- 10. Males and females, who fell under my care, nearly equal.
- 11. Gentle evacuations, with plentiful dilution, for the first three or four days of the disease, afterwards a tonic plan.
- 12. Where fymptoms of topical inflammation occurred, the most decided good effects followed the early use of the lancet and blifters; symptoms of pneumonia were frequent, and in two or three cases which I saw, there was violent inflammation of the membrane of the trachea.
- 13. Light nourishing diet, composed of animal jellies, sago, &c.

- 14. During the cold stage moderate warmth, but when the hot stage came on, great relief was generally experienced by the abstraction of heat, which was generally effected by the application of towels, wet with vinegar, to the forehead.—The affusion of cold water was not ventured upon, owing to the violent prejudices which exist against it.
- 15. I did not observe any distinct critical period—two or three cases, however, terminated in regular tertian intermittent, which submitted to the usual remedies.
  - 16. Relapses seldom occurred.
- 17. When they did occur, were rather more severe than the original disease.
  - 18. Convalescents recovered very slowly.
- 19. They were generally left very weak by the disease; and were long before they recovered their appetite for food.
- 20. Those whom I was called upon to attend, not being, generally speaking, in affluent circumitances, my attendance was dispensed with, when the more severe symptoms had subsided.
- 21. In old infirm people a difficulty of breathing, and tickling cough, were symptoms peculiarly troublesome.

- 22. I do not think the disease was contagious, having in more than one instance seen a part of the family of a dirty crowded cottage suffer severely from it; and others of the family, though sleeping in the same beds with the sick, escape.
- 24. When more than one was affected in the same house, it was generally at the same time.
- 25. The town of Pool is situated in a narrow vale, watered by the Severn, whose course is here from south-west to north-east. The town is sheltered from west to north-east, by high grounds; the habitations of the lower classes are close and dirty; it contains about 1500 inhabitants.
- 26. The most prevailing winds are the west and north-west.
- 27. The first cases of the disorder appeared eastward of the town of Pool; and its progress to the westward was so distinctly marked as not to escape common observation, which progression I did not observe to be at all influenced by intercourse.
- 31. The professional duties of the faculty were so much increased, during the pre-

valence of this epidemic, that I had not leifure for observations, not immediately connected with professional pursuits; however, I do not find, upon inquiry, that any such complaint existed.

### ARTICLE XLVIII.

From Mr. RAYMENT, Surgeon, Worcester.

JULY 1803.

Queries 1, 2, 3, 4.

From the 21st of February to the beginning of March, fourteen cases of catarrhal fever came under my care, but without the discriminating symptoms of Influenza, so marked as to fix the attention at the time; from this period they took place as follows.

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in all 188; of these 80 were males, 108 females.

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5. Besides

- 5. Besides the pyrexia, laborious breathing, a cough, the discriminating symptoms were great pain over the forehead, with some degree of giddiness, a deep sense of foreness on moving the eyes, considerable distress from strong light, and in some from much noise; great aversion to solid sood, thirst exceeding what might have been expected from the degree of sever; great prostration of strength and spirits.
- 8. Only one fatal case occurred, and this terminated on the fifth day, with the symptoms fatal, in peripneumonia notha.
- 9. Corpulent, relaxated, and debilitated habits appeared almost exclusively susceptible. I saw no children under five years old.
- portion of vinegar; calomel, and antimonial powder; at night decoct. hord. &c. with tamarinds by day, and after the first two or three days, a few drops of tra. opii, at bed time.
- 12. The very great prostration of strength in all the severer cases appeared peremptorily to forbid bleeding. It was not tried in the milder. Emetics were not used. Purging proved the most powerful means of lowering the

the fever; and in general, the stools were very offensive. Blisters were often useful. Strong opiates uniformly prejudicial The cure was never attempted by active sudorifics, except in the milder cases; in those they succeeded.

- 13. Light, demulcent, but more generous than in direct pneumonia.
- 14. In the flighter cases, a free exposure appeared to shorten, sometimes even to remove the complaint; but in the more severe it was extremely prejudicial, and the most frequent source of relapse.
- 15. More general by perspiration, some few by diarrhæa. The more protracted cases by expectoration.
  - 16. Not frequent.
  - 17. Febrile fymptoms much aggravated.
    - 18. Very flowly indeed.
- 19. Great loss of strength, spirits, and appetite.
- 20. Bitters and gentle aperients, diet nourishing, but not stimulating.
- 23. The city gaol including the governor's family, contained on an average 23, all of whom escaped.

The county gaol contained men debtors 11, and one woman debtor. Men felons 24, women ditto 15, with three children. The governor's family 7—in all 71; of these only the governor and his daughter had the complaint, and they very severely.

The house of correction contained men 18, women 7, three children, and the governor's family 2, in all 30. Of these only the governor had it, and he also very severely.

In a school for young ladies, consisting of 33 residing in the house, not one was indisposed; the day scholars were not equally exempt.

In a fecond febool of the same nature, confisting, with the family, of 48; more than 20 suffered; but here only one of the pupils had the disorder, with any considerable degree of violence; though the grown-up individuals of the family had it with that degree of severity which more generally prevailed.

### ARTICLE XLIX.

From Mr. JAMES FIELD, Surgeon and Apothecary, Worcester.

## JULY, 1803.

- 1. The Influenza.
- 2. I think I had an instance occurred so early as the 11th of January, which however, so soon merged into a fit of gout, as to render it uncertain. The second decided case I was called in to was on the 14th of February.
- 3. During the months of March and April.
- 4. Early in May it declined, but did not perhaps totally disappear, during that month.
- 5. Early and extreme debility, a distressing cough, expectoration frequently bloody; bloody mucus discharged often from the nose, and continuing, in some instances, long after the other symptoms had disappeared; violent pains in the head or back, or both, entire

loss of appetite; the pulse weak, quick, and sometimes uncommonly irregular.

- 6. The fymptoms, (which in most diseases are governed by age, habit, and temperament,) varied as little in different individuals, as in typhus, or any other continued fever.
- 7. In no instance that I witnessed; although some elderly persons appeared to be in great danger.
- 21. Ashmatic and peripneumonic complaints, which, combining with the Influenza, proved in some instances fatal.
- 22. I think not, from the circumstance of its happening in some instances to single individuals, in many, to two or three in a family at irregular and indefinite periods; and above all, from its shewing itself in a very slight manner, and in a few cases only, in schools, hospitals, and houses of industry, situations certainly the most favourable for communicating contagious diseases.
- 23. In our house of industry, containing about 160 persons, nearly one half of whom are children; not more than five or six were affected, and those slightly, except one, an

elderly woman, who has not yet recovered from the concomitant cough, &c.

The daily avocations of a complicated practice do not admit of a particular attention to all the queries contained in the Society's Letter. The mode of practice, and its various process has been already sufficiently detailed.

As, however, the question whether or not the late epidemic was contagious, appears to be the most important, it seems to me, that, if it had been so, the affirmative would be most easily proved; for, if contagious, we cannot but suppose it has some definite time and limits within which it must produce its effects; as in the scarlatina, small-pox, measles, and other well known infectious diseases. It would then happen, that when one or more persons in a family had been violently affected with the disorder, the other parts of the family attendant upon them, and constantly exposed to the hazard of infection, would be all falling ill nearly at the same period, which, however, did not happen in any case, out of some scores that fell under my observation.

## ARTICLE L.

From Dr. CHARLES CAMERON, Worcester.

June, 1803.

- 1, 2. The late epidemic first appeared here about the 4th of March.
- 3. It reached its acme in the last week of March, and first of April.
- 4. I do not think it has yet quite ceased (June 1st), but its symptoms now, are more like those of acute rheumatism, and I have seen two cases of men, in which the pains left the limbs, and the bowels were attacked with symptoms of inflammation.
- 5. Pain in the side extending to the back, rigor continuing for several days with little intermission, and though a little perspiration came on in a morning, the chilliness returned upon getting up, hoarseness, and dryness in the throat, head-ach, much aggravated by the cough, which was very violent, and sometimes spasmodic, attended in a morning with expectora-

expectoration of a yellowish mucus, sometimes streaked with blood. Pulse from 80 to 90, never so hard nor full, as to require, v. s. in some cases, the uvula, velum palati, and tonsils were covered with small aphthæ, and the evacuations were highly bilious.

- 6. Plus, and minus, seemed to constitute the chief difference.
- 7, 8. I lost one young man, who, at any other time, I should have said laboured under typhus. I saw no other instance of fatality, except in a few whose constitutions were broken down by intemperance and previous disease.
  - 9. It attacked all indifcriminately.
- 10. Rather more females, as they feem to constitute the larger proportion of the population.
- beginning, aq. ammon. acetata, or faline draughts with a little sp. æther. nitros. while the feverish heat continued, squill. with extr. cicutæ, and syr. papav. albi, joined with mucilage to relieve the cough, and finally to restore the action of the stomach, and consequently

fequently the strength, infus. gentian. compos.

- 12. Blisters had a good effect; I did not try any of the other remedies.
- 13. Till the appetite was restored, chiesly spoon-meats, and fruit, the drink consisted of barley decoction, tamarind, apple, or cheese-whey, and imperial.
- 14. Cool, and those who were able were suffered to walk out of doors when the weather would permit.
  - 15. Gradual amendment.
  - 16. No.
- 18. No. Cough, languor, and debility continued long.
- I faw but two instances where the husband and wife were both affected, and they too nearly at the same time, to suppose they received the infection from each other: but many, where only one was; and some instances occurred, where only one person was affected in a family, consisting of 8 or 9, this seems confirmed by the accounts from Persone and Droitwich, and by the disease commencing at different places, nearly about the

fame time. The only occurrence which fell under my observation, which may seem to militate against this opinion is the following. In the beginning of April, the master of a family was seized with Instuenza, attended with pain and swelling in the knees, since that time, a maid-servant, the apprentice, the daughter, and the wife, have all been taken ill in succession; though their complaints have chiefly been, pain and swelling in the limbs and joints, without any catarrhal symptoms; the case of the young man, I have alluded to above, No. 4. he was removed to his mother's in the country, but has not communicated the disorder to any of her family.

23, 24. In the Infirmary all the household, 11 in number, were affected, but so slightly, as not to require the affistance of the physicians of the house; the second person affected, was taken ill 3 or 4 days after her bedfellow; the third about 10 days after, but her bed-fellow not till near a month afterwards; here the first instance was too soon to suppose infection, and the last, in my opinion too late. Many of the patients also, in numbers generally from 54 to 60, had the

disease slightly, but in 3 beds pretty close together, the 2 patients occupying the outer beds, had the complaint, whilst the one in the middle escaped; and in our house of industry, where there are at least 130 people, not more than six were affected.

The following are all the communications
I have been able to collect, from the towns
in this county.

Shipston, south-east from Worcester about 28 miles, first began; sirst week in March; has now ceased; did not appear to be contagious, no epizootic complaint.

Evesham, south-east about 15 miles—commenced the beginning of March; was not contagious; no animals affected.

Pershore, south-east 9 miles, began 10th March, not yet disappeared, not contagious, in one family of near 30 persons, only one ill. Horses disordered.

Upton, south 10 miles—the first case of Instuenza occurred the 28th of March; the last, 20th of April, not contagious; this opinion supported by the case of a child 11 years of age, taken ill on 30th March, and who died on 21st April, with every symptom of typhus,

typhus, the toes, fingers, and lips black; and yet none of the rest of the family had any symptom of the disease. Horses were disordered both before the appearance of the disease, and during its prevalence.

Droitwich, north 7 miles, first appeared about the 10th March, ceased the end of April; not contagious. In the reporter's own family, between 50 and 60 in number, only 8 had the disorder: it was by no means so general in the town as in the country; during its prevalence, the cattle were unhealthy, cows and sheep in particular, and the farmers lost an unusual number of lambs. Cats also were affected, many of which died. I have not heard of any epizootic complaint in this town.

Worcester, 10th June, 1803.

Worcester, 17th June, 1803.

Since I transmitted to you the account of the Influenza, I have received the following statements from the remaining towns in this neighbourhood, which, as they complete in some points, the history of the late epidemic, I presume, may be acceptable to the Society.

Brom-

Bromyard, west from Worcester 13 miles. First appearance, 16th March, not yet ceased, 13th June, not contagious; no animals particularly affected.

Feckenham, north-east 13 miles. Some instances occurred the beginning of February, has now ceased, not contagious; animals not affected.

Bromsgrove, north 12 miles. Began the middle of February; the last person was attacked on the 10th of May. My correspondent says, "I am clearly of opinion it was contagious;" but gives no reasons for such conclusion—Previous to its appearance, horses were attacked with symptoms, strikingly similar to those in the human subject.

Bewdley, north-west 14 miles. First in-stance, 22d of March, ceased in the town the latter end of April. A few miles in the country further north, it began later, and continued longer: from its universal prevalence, cannot decide whether it was contagious or not. Horses about the same time were unhealthy.

## ARTICLE LI.

"GENTLEMEN,

"I should sooner have acknowledged the receipt of your letter, but physicians being seldom consulted here, except in alarming cases, most of the cases of the late epidemic which I saw either were complicated with pneumonia, or had terminated in typhus. I therefore put your letter into the hands of some of the best informed men I knew, surgeons and apothecaries, whose observations I now transmit to you.

" I am, gentlemen,

"Your obedient fervant,
"C. PHILIPS WILSON."

Worcester, July 30, 1803.

## ARTICLE LII.

From Mr. JOHN NASH, Surgeon, Worcester.

- 2. About the 20th of February.
- 3. The latter end of March, and beginning of April to 20th.
  - 4. The last week in May.
- fhoulders, loins, and limbs, redness of the eyes, sneezings, and incessant cough, thin mucus was discharged with the cough; in some there was nausea, in others not; the bowels were rather costive where the cough was violent; a lax state of the body rather relieved the cough, and with a complete diarrhæa there was little or no cough; a degree of sever attended the continuance of the disease, which produced great debility and loss of appetite.
  - 7. No.
- 11. Gentle purgatives and mild diaphoretics, such as small doses of calomel, camphor, and

and antimonial powder, with the faline mixture, and infusion of sena (if required); emetics were given if the stomach indicated their use, but the above medicines generally cleared the primæ viæ.

- 12. Bleeding was not found necessary in the true disease.
- 13. Such as is generally directed in all in-
  - 14. Warm.
  - 18. No.
  - 19. Greatly debilitated.
  - 20. Change of air, and tonic medicines.
- 21. Such as had been before afflicted with inflammation of the thorax, and those who had been much weakened by former afflictions, became victims.
- 22. Not from persons affected, for many in a family were disordered on the same day, and within the same week.
- 23. It did not affect all persons in the same house.
- 25. The city of Worcester, and neighbouring villages.
  - 26. North-east winds.

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# ARTICLE LIII.

From Mr. FRYER, Surgeon and Apothecaty, Bewdley.

Answers to some of the Questions proposed by the Medical Society of London.

- 1. No epidemical disorder has appeared here, this last spring, that differed materially from the usual diseases of the season.
- 2. The first cases of Influenza, that occurred in my practice in the town of Bewdley, were on the 22d of March, 1803.
- 3. The disease was very prevalent, and at its greatest height, during the 27th, 28th, 29th, and 30th of March.
- 4. It declined much before the middle, and disappeared in the town before the end of April; it continued in the country somewhat later, particularly about Mamble, Kinlet, and over Areley, parishes that are situated to the south-west, west, and north west of Bewdley.

5. The

- 5. The most usual symptoms of the complaint were rigors succeeded by much heat, anorexia, pains of the head and limbs, redness of eyes, very troublesome cough, hoarseness, dyspnæa, pains of the chest and sides, great faintness and prostration of strength, particularly about the third day, bowels generally costive.
- 6. The symptoms did not vary much in individuals apparently of the same habits, &c.
- 7. When unconnected with other diseases, it was fatal only in one instance.
- 8. The proportion of fatality was very fmall.
- 9. Adults, persons of the middle and better orders of life, were most subject to the disease, old people, and those who had been subject to diseases of the lungs, felt it most severely and satally.
- 11. The mode of treatment, employed with the best effect, was to give early in the disease, a dose of calomel, with pulv. antimonialis and pulv. rhubarb, which generally occasioned vomiting, and fully emptied the bowels with much relief, febrile saline mixtures, oxymel scillæ, mucilaginous anodyne medicines to Gg 2 allay

allay the irritation of the cough, rubefacients and blifters applied freely, when the pains of the cheft or fide, or the dyspæna were urgent; when the fever and these symptoms were much abated, the infusum amarum and other remedies of that description were very useful; the cortex peruvianus was only tried in one or two cases, and in those it seemed to disagree,—bleeding was not had recourse to.

- 13. An antiphlogistic diet was recommended at the beginning of the disease, afterwards a more strengthening plan was adopted.
- 14. The room was directed to be kept of a moderate temperature, and the patient was defired to avoid extremes of heat or cold.
  - 16. Relapses were not frequent.
- 17. Some patients recovered very rapidly, in others the recovery was flow, much debility remaining, and the cough, and dyspnæa continuing some time, and going off gradually.

In the few fatal cases in which the lungs were previously diseased, it terminated in peripneumonia notha.

22. When at its greatest height, the discase was very general, in some families the whole

whole were affected, in others, not more than one or two, and fome families totally escaped it, although they had communication with families in which the disease was prevalent.

July 26, 1803.

### ARTICLE LIV.

From Mr. CUSTANCE, Kidderminster.

June 21, 1803.

- 1. Yes, one commonly known by the name of the Diforder, New Delights, or Influenza.
- 2. It appeared first in Kidderminster, about the middle or latter end of February.
- 3. Towards the latter end of March, or beginning of April.
- 4. It ceased to be a general disease, about the middle of May; but individual cases have occasionally occurred, to the present day.
- 5. The most urgent symptoms were pain about the frontal sinuses, dyspnæa, and cough, with fever.
- 6. Yes, very much. The difference, however, did not feem to respect either families, equal age, similar constitutions or different sexes, sufficiently to draw any conclusions.

- 7. To the best of my own observation and other information, not more than six persons died in this town (containing a population of between 6 and 7000) purely of the Instuenza; two of which were infants, under a year old, one a girl of 14, of a scrophulous habit, one an old man of 70, one a hard drinker and corpulent, another a sober man about 40, whose attack was clearly the Instuenza, which in a few days, degenerated into typhus with petechiæ and sore throat.
- 8. Cannot determine, but certainly it was very small.
- 9. Persons in the decline of life, the poorer classes, and consumptive or pneumonic constitutions, suffered most.
- 10. Cannot determine, but think the difference trifling.
  - 11. The antiphlogistic.
- 12. Bleeding was not used, but in two or three of the most urgent cases of cough, and dyspnæa; antimonials and blisters were chiefly relied on, in the first stage, and the best effects almost universally followed the application of the latter in relieving the cough and Gg4 pain.

pain in the head. The squill pill, ammonia pp., &c. were often given, to promote expectoration, and the bitter insusion with spt. ath. vitr. and very small doses of tinct. opii were invariably beneficial in restoring the strength and appetite.

- 13. Antiphlogistic, at first, more stimulant and nutritive afterwards.
  - 14. A cool one.
- 15. With profuse perspirations at night, dry cough, and extreme debility.
- 16. Not very—those that occurred ought perhaps to be rather considered as arising from indiscretion before the disease was removed, than from any fresh attack, though a few were certainly attacked a second or a third time.
  - 17. Generally less severe.
- 18. Few in less than a month, many much longer, and one gentleman did not recover his strength, nor was free from his cough, in less than ten weeks, though before a healthy man of about 36.
  - 19. Referred to the 15th answer.
- 20. Referred to the latter part of the 12th answer.

- 21. Made no particular observations enabling me to determine.
- 22. It has appeared to me to be contagious, for reasons stated in the 24th, and 27th, answers.
  - 23. No opportunity of observing.
- 24. Generally in succession, at the intervals of from four days to fourteen, and even twenty.
- 25. Kidderminster is a crowded manufacturing town, stands in a valley, upon the river Stour; the soil very red sand, and surrounded with a soft rock of the same, mixed with gravel. A canal also runs through the town, which communicates with Manchester, and empties into the Severn at Stourport.
- 26. During the present year, most frequently to an east or north-east.
- 27. Stourbridge, about 7 miles to the northeast, was affected about a fortnight before Kidderminster, and Bewdley, and Stourport, between 3 and 5 miles to the south-west, about the same period after. The inhabitants have daily communications with each other, from the trade of the town.
- 28. The barometer has varied little, during the year, between fair and changeable.

- 29. Have made no particular remarks.
- 30. Remember to have had the Influenza in 1782, but was too young to make any obfervations.
  - 31. No.
  - 32. None worth communicating.

# ARTICLE LV.

From Mr. HORNIBLOW, Shipston upon Stour.

JULY 1, 1803.

- month of March, we had an unufual degree of difease, the complaints were attended with much coughing, about one half of them were evidently inflammatory, more or less requiring bleeding, others had great debility with much coughing and expectoration, but little sever, and the pulse but slightly affected, it continued upon the subjects of it about a fortnight before they could throw it off, it was not attended with spitting of blood.
- 6. I had at the time much coughing myself with great expectoration, but without debility or any other complaint (aged 4.1). My father (aged 64) of a strong constitution had much coughing, great expectoration and great debility for about ten days, but his pulse little affected,

affected, and he had but very little fever. In the same house a woman (aged 60) had considerable inflammation of her lungs requiring bleeding twice, she had great expectoration; and must have died without the use of the lancet.

- 7. Very little fatal, except in such cases as were considerably inflammatory, and bleeding not timely used. In the cases of great debility, coughing and large expectoration, with but little fever or quickness of the pulse, which is the complaint particularly in question, almost without fatality.
- 9. Do not recollect its affecting persons under thirty years of age.
- 12. Bleeding in one case I considered hurtfull, the blood not being inflamed, although the pulse was strong.

I saw one person I considered a convalescent, soon get worse and die, after the free use of infus. quass. with t. opii camph.

- 18. They recovered very flow.
- 22. Am not able to fay it was contagious, I think it was not fo, our patients were ill in the same house, at the same time.

25. Generally.

29. I believed at the time that the difease arose from the keen north and north-east winds, which continued long, and very piercing.

## ARTICLE LVI.

From SAMUEL ALLVEY, M.D. Saint Neot's.

It appears to be the general wish of the medical world at this time to receive information from every quarter, upon the subject of the prevailing epidemic, in order, as fully as possible, to trace its commencement, continuance and fymptoms, and to investigate its contagious nature. Much has been faid and written upon this disease; it is tolerably well understood by most practitioners, and the more clearly fo when it appears in its true and genuine form of synocha epidemica catarrhalis, and it may feem to some superfluous to write upon the subject: nor is it my intention to take up much of your time, but still I think with many others, that it is a praise-worthy underdertaking to bring forward our opinions and observations, and more particularly so in those practitioners who have seen the greatest variety of cases, and to lay down in a concise manner that that method of treatment which they have found best to succeed, as well as their disappointments and failures, that upon the reappearance of a disease so universal, so frequently distressing, and so often fatal, we may be better prepared to contend with it, and enabled to call in the agency of those means, which were before found to be the most useful.

I find by the minutes made in my case book, that during the months of December, January, and February, the sever called typhus, but particularly typhus mitior was by far more prevalent with us than any other acute disease.

A few cases of both scarlatina simplex and scarlatina cynanchica appeared at the same time, and several of those attacked with typhus, had at its commencement a slight essortimes with, but more frequently without, a trisling degree of ulceration of the sauces; during the course of that time I only met with one instance, in which the sever was accompanied with a considerable sprinkling of petechia, particularly upon the lower extremities,

and

and that young man recovered. The foreness of the throat in most cases went off in a few days, without at all influencing the criss of the fever. I find also by my list of acute diseases for January and February, that nearly one in four were cases of typhus.

Towards the end of February acute rheumatism with slight inslammatory affections of the nose, throat, and chest, began with us to be very general, and about this time in London, and its vicinity, the genuine catarrhus contagiosus showed itself as a very formidable epidemic, and soon spread from the capital to the most distant provinces of the empire.

In my neighbourhood the month of March was ushered in with this Influenza, together with a variety of other inflammatory affections of the different viscera, for the most part perfectly distinct from each other, but possessing many symptoms in common, and almost always attended with a greater or less degree of catarrhal fever. It cannot be surprising, when we resect upon the subject, that at the time an epidemic so very generally prevails, the diseases common to the same season

feason should assume symptoms more or less analogous, and so far acquire a mutual refemblance to each other; I observed that by far the greater number of children, young people, and those of middle age had the complaint slightly, continuing from 2 days to 7 or 8, and then it went off slowly; but some of them had a great degree of pyrexia with inflammatory symptoms of the most alarming kind, and this was observed to be the case more in some districts than in others \*.

It sometimes happened, that this disease was accompanied, at its commencement, with a fever of the typhus kind, and when the catarrhal symptoms were less troublesome than the fever, they would soon go off or be greatly diminished in the course of a few days; while the fever remaining under the type of typhus

\* In most parts of Bedsordshire, particularly in the towns of Biggleswade, Potton, Gamlingay, and in the villages and hamlets around them. At the latter named place, I was told by the vicar a sew days ago, the Rev. J. Hepworth, that he buried in the course of a sortnight eleven people who all were said to die of this disease, and the majority were children.

Gamlingay is a village containing about 500 inhabitants.

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Hh

mitior,

mitior, and fometimes gravior, continued to harafs the patient for a great length of time.

—In elderly people this epidemic proved invariably obstinate, remarkably troublesome, and frequently satal; showing itself principally under the form of peripneumonia notha, and often, with the exacerbation of sever, would come on the most distressing dyspnæa, with little or no expectoration. Many of these people were troubled with a most violent pain in the back, sometimes between the shoulders, and often as low down as the loins, which would be among the last symptoms to leave them.

With respect to my method of treating this complaint, excepting where the inflammatory symptoms run very high, I abstained altogether from the use of the lancet. Demulcents, laxative medicines, gentle emetics, sudorises, the saline mixture, and blisters, generally lessened the sever in a short time, and removed the inflammatory determination to the head, throat, and chest; and when these were diminished or removed, and not before, my attention was then directed to the cough, and weakened state of the lungs. Mucilaginous,

ginous, but not heating expectorants, with sometimes, if rendered absolutely necessary from the watchfulness being very much complained of, or spasmodic dyspnæa being very urgent, opium in small doses, repeated according to circumstances, and compounded with preparations of æther. The compound Burgundy pitch plaster applied, ad nucham aut inter scapulas afforded these symptoms often much aid, and in two particular cases where the pain of the back before mentioned was very troublesome, gave great relief; to convalescents a light infusion of the Angustura bark with oxymel fimplex, and tinctura corticis cinchonæ proved a most useful tonic and restorative.

This has been the practice which I have followed with great success in the treatment of this epidemic, which, when accompanied with other affections of the system, or complicated with other diseases, was varied from time to time according to circumstances, and the urgency of symptoms complained of, consequently that particular indication of cure termed by authors—" the mitigating of urgent symptoms" was never lost sight of.

Hh 2

During

During the months of March and April a great number of other diseases, acute as well as chronic, have appeared and continue to arise, but by no means so general within the last fortnight; all of which, owing I presume to the peculiar constitution of the atmosphere, prove not only more than usually obstinate and tedious in their progress, but our patients, for the most part, I find remain uncommonly long in a state of convalescence, before they can be pronounced perfectly recovered.

I much regret that my opportunities of information do not allow me to be more full and instructive, but perhaps these efforts may prove a stimulus to some of our members to bring forward the subject, whose acquaintance with the disease is more general, whose experience is more enlarged, and whose observations have been more particularly directed to the inquiry.

Such, however, has been the unhealthy state of the country during the whole of this spring, that it would be almost an unpardonble omission for the members of any society, who profess to keep a register of medical cases and observations, to pass it by unnoticed.

This,

This, gentlemen, will plead my excuse for venturing to lay before you this rude sketch and general outline of the state of the health of my own county and neighbourhood, as far as my acquaintance with it enables me, and I hope you will believe that in drawing up this account I have studied to be informing rather than eloquent, and to be useful rather than prolix.

Non quærit æger medicum eloquentem, sed fanantem. Seneca, Ep. 76.

### ARTICLE LVII.

From THOMAS GIRDLESTONE, M.D. Yarmouth.

The first cases of Influenza which came under my observation this year, were on the 22d of last January. They prevailed more or less from that time, in this neighbourhood, and were most frequent between the 15th of March and the 20th of April. The disease then began to decline, but four cases of true pneumonia, which occurred last Friday, June 17, to patients of Mr. Downs in this town, tend to prove that this disease has not yet ceased, though it may have changed a little its fymptoms. One of the patients I have feen, and the blood which had been drawn. His symptoms were decidedly inflammatory, and the blood was of a buff colour, with the strongest cup-like contraction I ever saw. All these cases yielded to bleeding, antimonials, and a diet of broth, without any wine, spirits,

spirits, or malt liquor, during the febrile symptoms. The common symptoms of the Influenza were hoarseness, sneezing, defluxion from the nose and eyes, chilliness, heaviness, and pain of the head, especially over the eyes, cough, pain of the back, stitches of the side, with more or less of quickness of the pulse, and whiteness of the tongue, heat of the skin, and rheumatic pains. In some there were foreness of the throat, or eyes, stiffness of the neck, great loss of voice, icteric-coloured urine, and whitish motions; -- and in children a remarkable drowsiness almost universally commenced with the disease. These symptoms very rapidly changed in some patients to the more alarming symptoms of effusions in the chest. Clammy sweats, stupid delirium, typhus-coloured tongue, frequent, feeble or interrupted pulse, sometimes with diarrhæa.

This disease was very different in the patients who resided under the same roof. The symptoms of inflammation being almost the only symptoms in some patients; in others all the symptoms changed so suddenly as to require as sudden a variation of the treatment. In children, and women, who were not aged.

or otherwise diseased, it was generally a mild disease. But in the aged and intemperate, or where previous disease existed, it was variable, and alarming; for like most epidemics it blended itself with all chronic diseases. I have very great doubts whether the Influenza has ever been a fatal disease unconnected with other diseases, or the too early and liberal administration of opium, without the combination of either antimony, calomel, or ipecacuanha.

The proportion of fatality in this neighbourhood, I should think, did not amount to one in three hundred. For though scarcely any of the inhabitants escaped in this place, yet in the many, it was a disease of only 3, or 5 days duration, and so slight that the patients often recovered without any medicine or medical attendance.

Though no ages or fex appeared to be exempted from this disease, yet those who had laboured under diseased viscera generally selt it most severely. But there were some exceptions to this observation. As, but sew of either sex escaped this disease, and as there are more semales than males in the kingdom,

in course more females than males laboured under the disease. Blisters, antimonials, and calomel, were found very uleful medicines, provided that they did not produce too much evacuation. I was feldom called early enough to try the effects of bleeding. There were some few cases, where I think it might have been tried with safety. Full vomiting seldom formed a part of my practice, nauseating medicines appearing to me to be more useful. But in some patients the symptoms varied so rapidly as to occasion a very opposite mode of treatment. The worst cases appeared to me to have arisen from the too early administration of opiates, which if uncombined with antimony, ipecacuanha, or calomel, hurried the fymptoms into those of typhus pneumonia. To a patient in this state, after volatile alkali, small doses of opium and confectio aromatica had failed fo completely, that the patient could not inflate his lungs or swallow more than a tea-spoonful at a time, the following draught, given every three hours, feemingly produced his recovery; for after every draught, he was found to breathe better.

R. Mosch.

R. Mosch. ver. gr. x.

Tinct. Thebaic gts. v.

Ammon. pp<sup>t</sup>. g<sup>r</sup>. vj. mucilag. gum. arabic. 3 ss. aquæ puræ 3 iijs. m. Haustus.

Lemonade, oranges, sago, and broth, were found generally best for the diet, while the tongue had a whitish fur. When the tongue had more of the typhus appearance, winewhey, beaf-tea, and Port wine, were used.

The greatest number of children, who were under my directions, required no other medicine than as many oranges as they chose to suck.

The rooms were never regulated by the thermometer, but they were defired to be kept rather cool than otherwise. And as I never saw the benefit of preventing patients from lying down under any fever, I never recommended them to sit up till the symptoms of sever disappeared.

The usual termination of the fever was like that of a common catarrh, by the expectoration of a pus-coloured mucus, precipitation in the urine, and scaling off of the fur from the tongue. But the feebleness of the thighs, back, and pains of the ankles, were generally

generally felt with more or less of spasmodic cough for some time after the termination of the fever. The relapses were but few. When relapses did take place, the symptoms of debility very foon came on. Most of the convalescents felt themselves weakened for some time, with the pains of the ankles, back, and thighs, and many of them had periodical returns of cough, or unpleasant feelings every 2d or 3d day; and in those who were previously consumptive, their symptoms degenerated into hectic fevers with mucus or purulent phthisis. The cough, which remained in many for some time, was often of the spasmodic kind, and increased or diminished as the appetite for food improved or difimproved.

The treatment which succeeded best during the convalescent state, was that which improved the appetite, and quieted the cough. Such as zincum vitriolatum, and extr. thebaic. pil. c. scill. with extr. thebaic. infus. rosæ, with tinct. thebaic. or medicines with myrrh, ferrum, ammonials, and extr. thebaic. or ammon. with bitters. The concomitant disorders which appeared to combine with this endemic,

endemic, so as to render it most fatal, were those of old age, intemperance, or phthisis.

The present Influenza has not furnished me with a single fact to lead me to believe that it is a contagious disease. Numbers in the same day were attacked, who had no communication with each other. And in the worst case which I saw of this disease, where the typhoid symptoms were so evident, the nephews and niece, who night and day nursed the patient for four or sive weeks, all escaped without the slightest symptom of the disease. With the greatest number of children, &c. who resided in schools and other crowded places, this disease passed only as a common cold.

Numbers in the same house were attacked on the same day, others were attacked at the intervals of 12 and 24 hours, and some sew at the 3d or 4th more distant day. Yarmouth and its neighbourhood are very much exposed to the north-east, and north-west winds.

The Norfolk and Suffolk sides of Yarmouth were at the same time labouring under this endemic, and the more the sacts of this disease

ease are examined, the less reason there will be found to suppose, that this endemic was regulated by intercourse.

In the mass of patients this disease differed but little from former Influenzas. In some the symptoms of debility came on more rapidly and lasted longer than in any preceding Influenzas.

During this epidemic, I have not heard of any epizootic complaint existing in this part of the country.

I shall annex an abstract from a meteorological journal, which has been kept in this town from the commencement of this year to the present period.

A Meteorological Journal kept at Yarmouth on the Commencement of the Year 1803.

Rain.		3 of an inch.	38 . 2 Inches ½.	§ of an inch.	I Inch I.	I Inch 5.	2 Inches.
Heat.	Lowest Medium	35	38	43	52	54	603
		2C	26	33	40	46	51
	W. W. N. W. N. E. Higheft heat.	45	31	58	.58	64	89
Winds.	<u></u>	-	3	4	9	14	-
	ż	3	н	3		0	
	W.		63	0		н	
	N.		I	2	00	ري د	8
		63	3	I	9	10	9
	S. S.	9	4	0	5	0	I
	S E.	~	jand .	 	(0)	post	3
	E	91	8	3	63	0	1
Number	of wet	9	15	11	14	15	ΙΙ
Number Number Winds.	of dry days.	25	13	07	26	91	6
Weather		-					*
Months.		January	February	March	April	May	June

N.B. The journal for June includes only the first 20 days.

The last January has been the driest month of January in this town for these last nine years.

#### ARTICLE LVIII.

From Mr. WEBSTER, Denham.

June 19.

- rst. Question. No epidemical disease prevailed in this neighbourhood during this spring, excepting the measles which were attended only with the usual symptoms, and were not fatal.
- 2. The Influenza commenced here about the 12th of March.
- 3. Most predominant about the second week in April.
- 4. It began to cease, in the first week in May.
- 5. It was attended with great drowliness, prostration of strength, dry cough, and sometimes the breathing painful, though not to a considerable degree.
- 6. I faw very little variation in the disease, excepting some individuals being much less affected than others.

- 7. It certainly has been fatal, when not connected with any other disease.
- 8. We lost about four (to the best of my recollection), but I cannot speak to the proportion of the whole, nor the number we our-felves attended.
  - 9. In elderly people and infants it feemed most fatal.

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- 11. A folution of opium in volatile alkali, given in small doses, and repeated every four or five hours, seemed in general the best plan of treatment.
- 12. We did not bleed in any instance, but have understood where that has been done, or spontaneous hæmorrhage has taken place, the patient has been slow in recovery. Emetics were in some instances beneficial.
- 13. Animal food or broth, with about a pint of wine, in the course of 24 hours was allowed.
- 14. Our patients were kept in the open air, as much as the weather would permit.
- 15. I observed no particular symptom in its termination, but left the patient in great debility,

debility, which required much time to recover.

- 16. We certainly had some cases of relapse, though not frequent.
- 17. The symptoms in the relapse were like the first attack, but not of so long duration.
  - 18. No.
  - 19. Already answered.
  - 20. Bark, vitriol, and Port wine.
  - 21.
- 22. The Influenza does not appear to me infectious, no otherwise, than persons breathing the same atmosphere, may suffer the same disorder. I do not recollect any medical man in this neighbourhood being much, if at all, affected by this disease.
- 23. I attend a large house of industry, but the paupers thereof had very little of this disease.
- 24. This disease has passed through almost the whole of private families, though very large.
- 25. I observed inhabitants of dry as well as marshy situations, both equally afflicted with this disorder.

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26. North

- 26. North and north-east winds chiefly prevailed.
- 27. I have no reason to think intercourse has in any measure increased the disease.
- 28. I did not keep any notes of the weather, not expecting any application on this subject.

29.

- 30. I recollect the Influenza, (I think in 1774;) was then apprentice in Norwich, the symptoms were more flight, and of much shorter duration, the disorder giving way in a few days to antimonials, or any other diaphoretic medicine.
- 31. Previous to the appearance of Influenza, I understood there was some contagious disorder among the horses.
- 32. I observed that those patients who kept their beds, and in whom prosuse perspiration was continued, or who suffered large evacuations, were most slow in their recovery.

#### ARTICLE LIX.

From Mr. CROWFOOT, Beccles, Suffolk.

TUNE 22, 1803.

We have been visited by the general epidemic termed the Influenza, but by no means to that extent, or attended with the mortality described by some practitioners to have occurred in the metropolis, or in other large and crowded cities.

It first appeared with us in the beginning of March, might be considered at its greatest height in the month of April, and to have continued, in the whole, about two months.

Most were seized suddenly and complained of lightness, or giddiness in the head, nausea, or loss of taste, frequent chilliness, a general tenderness of the body and limbs, as if flightly bruised. Catarrhal affections generally fucceeded, and attended throughout with roughness or soreness in the throat.—The cough extremely troublesome, great sense of Ii 2 weakness,

weakness, and an early appearance of whiteness on the tongue, which seemed characteristic of the disease.

The fymptoms varied much in different individuals some complained of deafness, others were seized with obstinate vomitings, and particular irritation in the bowels,—but the most urgent symptoms were peripneumonia, and in some, cases of phthis evidently accelerated the death of the patients.

I do not know it has proved fatal in any instance unconnected with other diseases;—nor that any age, or class, or constitution was exempt from the disease.—Servants employed in husbandry, or in the open air, were equally liable with those whose business confined them within the house, and vice versa.

As to medical treatment, emetics, and gentle aperients were first employed, opiates afterwards, joined with expectorants, had commonly a good effect, and blisters upon the chest proved very beneficial in cases of violent pain, and disticulty of breathing—very young subjects were immersed in the tepid bath with manifest advantage—from the great weakness in general complained of, bleeding was rarely

recommended. After the first day or two, light animal broths, &c. were allowed, and a moderate use of wine; and with respect to temperature, the feelings of the patient were consulted, and it was regulated accordingly.

From the extreme variableness of the weather, and the debilitated state of the convalescents, relapses were very frequent; and in many instances the disease ended in the form of an intermittent.

The \* Cinchona, Cascarilla, and other tonic remedies were employed, with the vitriolic acid, to check those profuse perspirations which frequently succeeded the complaint—these, with the occasional use of chalybeates, and a suitable nutritious diet, were the best restoratives.

Two fatal cases of cholera occurred which were apparently blended with the reigning epidemic; and indeed it seemed to increase

<sup>\*</sup> I have lately made use of the broad leaved willow bark, (recommended by Mr. Wilkinson, of Sunderland, in a late publication,) and though my experience will not allow me to speak decidedly upon its merits, I have reation to believe it may prove a valuable medicine.

every other disease which existed at the time of the attack.

It appeared to me the Influenza was not contagious, because medical men and nurses generally escaped the disease—that although feveral persons, and sometimes a whole family, were affected by it, it was not in that succesfion, or at those intervals, which might reafonably be supposed to depend upon contagion-and that often an individual or two, only were affected in large families, though constant intercourse was kept up with the healthy persons under the same roof .- Ori the other side it ought not to be concealed, that in two or three instances a casual visitor of the fick was very shortly after affected with the malady, and it was attributed, by the individual, to this communication.

The situation of Beccles is on the banks of the Waveney, considerably above the level of the river, and is generally accounted a healthy town—it is distant in a direct line, about eight miles from the sea, and is expessed to the north and east winds.—It is worthy of remark, that Lowestofft, which is one of the nearest points of the coast, was very little, or not at all, affected with Instruction, when much indisposition prevailed

prevailed with us, notwithstanding the great intercourse between the two towns.

I have nothing to observe on the analogies of former Influenzas, one of the last having happened when I was in India; nor did I notice any epizootic complaint previous to, or during the prevalence of the disease.

For the following meteorological observations, I am indebted to the journal of an intelligent and worthy neighbour, who is an accurate observer of the weather—his thermometer is placed on the north wall of an open room, and differs about four degrees from the scale of Farenheit. I have taken the extreme height and variation for the last four months, and the general direction of the winds which have prevailed; but should it be thought necessary to transmit particulars, the whole shall be copied, and sent to the Society.

The summer and autumn of 1802 were unusually dry, and there was little frost before the end of the year.

In January 1803, the weather continued mild until the ninth, the latter part of the month was sharp and frosty, with much I i 4 wind,

wind, chiefly from the east and north-east.—
Thermometer during the month from 54 to  $42\frac{1}{2}$ .

February, the frost continued to the seventeenth of this month, and the navigation of the river had been stopped by the ice, from the ninth of last month.

After the 17th the weather was very mild, with much wind varying from the north-east to the north-west, and the last part south-west and west. Thermometer 54½ to 44.

March was severely frosty the sirst part, the latter very sine and mild, good spring weather with very little rain. Wind extremely variable and boisterous in the former, blowing a gale on the 7th and 8th, from the north-east; the latter part south-west, east and north-east. Thermometer 61 to 47.

April, mild and pleasant the first part, very windy and very cold afterwards with hail and snow. Wind from the south-west, and south-east to the north-west and north. Thermometer 61 to  $52\frac{1}{2}$ .

May, this month was windy and cold, with frosty nights in the first part; the last week some fine showers with softer air, though

though still windy. Winds west and south-west, changing for some days to the north and north-east, and returning in the last week to the south-west. Thermometer  $62\frac{1}{2}$  to  $54\frac{1}{2}$ .

### ARTICLE LX.

## R. WHITE, M. D. Bury St. Edmund's.

The epidemic called Influenza, in most parts of the neighbourhood of Bury St. Edmund's, except in the complicated state of it, was by no means fevere. Few there were who called for my affistance, exclusive of those who were weak and infirm, or subject to chronic complaints. In the earliest stage of the disorder simply and alone, therefore, I am not able to give answers to several of the questions stated, with the precision I could wish: more especially with respect to its origin and progress in these parts. For these and other particulars, I am obliged to feveral of the faculty, in and about this town; who had a better opportunity of noticing them. With this preliminary I readily offer the result of my practice in this disorder, and of my earnest inquiries.

Queries.

Queries. 1. The common diseases in the months of January and February previous to the Influenza, were catarrhs, rheumatism both chronic and acute, measles, and a few slight remaining attacks of scarlet fever.

- 2, 3. The epidemic was observed in this place, about the first or second day of March; in some of the neighbouring villages sooner, in others not so soon. About the 20th of that month it became pretty general.
- 4. Was at its greatest height about the first week in April; and entirely disappeared in the beginning of May.
- 5. The most urgent symptoms catarrhal, and peripneumonic, with slight inslammatory action, spasmodic cough, uncommon debility; other more general symptoms were, dull muscular and membranous pains in the head, neck, back, and joints; and with the dyspeptic, sinking in and about the præcordia.
- 6. Symptoms varied in different individuals, principally according to the nature of the constitution and habits.
- 7, 8. Fatal only in one instance under my care, when unconnected with any other cause; and that in a strong healthy aged person, with

with marked fymptòms of peripneumonia vera.

- 9. Middle-aged and infirm, relaxed perfons, most prone to the disease.
- 10. No absolute difference with respect to fex.
- pared with aq. ammon. acet. mist. camphor. and syr. papav. a. as necessity required, soon after the attack; and at other times, during the severish symptoms, blisters and expectorants occasionally; neither bleeding nor antimonials, sometimes pulv. ipecac. comp. with calomel at night, and gentle aperients.
- 12. Very few of the practitioners in this part, either bled or gave antimonials, except on pressing occasions; both which means, although attended with momentary relief, they conceived were productive of increased debility: even at the first apparent inslammatory action.
- 13. Moderate diet agreeably to constitutional health.
  - 14. Moderate temperature most suitable.
- 15. Usually terminated by perspiration, expectoration, or a copious sediment in the urine,

urine, in a few individuals, by a flight diarrhea.

- 16, 17. Few relapses, except in the complicated state. Relapses similar to the original attack, and proportionably less severe; but lasting, and attended with more debility.
- 18. Convalescents, with low regime, recovered but slowly.
- 19, 20. In most persons the attack was sudden, with remarkable debility, in all was succeeded by it. The subsequent treatment, a generous diet, light tonic bitters, decoct. or infus. cor. with due attention to alvine dejection; most habits having been troubled with costiveness.
- to the pecaliar habit of body. Delicate and relaxed habits subject to catarrhal symptoms, and spasmodic irritating cough; bilious, to retching, and painful affection in the stomach, and bowels; each, with wandering and aching pains in the head, neck, and joints; asthmatic patients, with increased peripneumonic symptoms, and suffering most. In general, the tongue white, the pulse quicker than ordinary, slight chills, but no sharp rigor, excepting

No. 7; irregular pains, lassitude, and extraordinary debility; with some desluxion from the eyes; cough, dull pain in the chest, and over the eyes with most persons.

- 22. Not contagious; from partial attack in most families, and non-communication to the major part of large families.
- 23. The disproportionate number was particularly exemplified at the three principal boarding-schools, in this town. In one confisting of 72 boys, and 8 domestics; one only of the latter, and not more than 5 boys were attacked with the common fymptoms, two of whom kept their beds for a day or two at the onset. In another school of 30, with domestics, not more than 4. And in a third of 50 young ladies, with teachers, and household servants, no more than 3, all very slightly affected. Each of these houses had not long before been visited with the measles. Day scholars were indiscriminately admitted, several of which class were affected with the epidemic.
- 24. There were a few instances of persons seized on the same day in the same family; several

several at slight intervals, when at its greatest height.

- 25, 26. Diversity of soil in and about Bury. The face of the town, principally a stratum of light earth over chalk; the same in general is that of the villages in the flat open country, for feveral miles: these exposed to north, north-east, and north-west winds. That, of villages in opposite direction, and in an inclosed part, is a loamy earth on clay. Some difference in the effect of this disorder has been remarked; namely, that the inhabitants of the town were proportionally less affected both in number and smyptoms, than those of the country around; this also appears to have been the case in some degree, in favour of the bleak open country, with respect to the inclosed part of the neighbourhood.
- 27. Not regulated by intercourse; the inhabitants of a village very near to Bury were latest affected; by ten days at least.
- 28. My worthy friend Capel Loss, who lives at Troston, a village 6 miles distant from Bury, has favoured me with his meteorological remarks; whose observations did not extend to that of the winds; but I very

well remember, that, about the time of the epidemic first appearing in this quarter, the air was cold and frosty, and the wind set in from the north and north-east.

I must beg leave again to observe that I was generally called in to persons labouring under the combined state of the disorder; in two of which cases the symptoms were extremely indirect, and violent.—One in the last stage of pregnancy, the other soon after delivery. Both taken fuddenly with catarrhal fymptoms, pain in the left fide, shortness of breath, constant and irritating cough, with incessant retching, attended with a weak irregular and innumerably quick or fluttering pulse, for several hours together; slight delirium during the violence of the symptoms, and profuse clammy cold sweats; apparently dying. The first woman was delivered of a dead child on the third day after the attack, and died on the 5th. The other patient was put to bed with the Influenza, and, on the fifth day after delivery, was fuddenly feized with pain as she termed it at the heart; and the same kind of symptoms as the first; but with flight remissions. Happily she obtained relief relief from the means used on the former occasion. Blisters on the side, back and stomach, bolus with sal succin. camphor and conf. aromat., draughts with mist. camphor., tinct. opii and spt. æther. vitr. comp., nutritive diet, and afterwards infus. cort. per. with light bitters.

June 11, 1803.

#### ARTICLE LXI.

From Mr. GODFREY, Surgeon, Coggeshall.

June 16.

The disease in this neighbourhood made its first appearance the beginning of February, was most prevalent in the month of March, and had nearly disappeared by the end of April. The first and general symptoms were chilliness followed by more or less of heat, remarkably white tongue, much pain in the loins and limbs, but very severe in the head, chiefly forehead. It is a little fingular, that in a very confiderable number of my patients the pulse was rather foft, and certainly not quickened, though the tongue was white, and much loaded, the urine depositing a copious and red brick-dust-coloured sediment, and as much consequent general debility, as where there had been a great degree of increased action in the vascular system. There was in almost

almost every case more or less inflammation about the lungs; some sew (one with hæmoptæ) required the use of the lancet—an expectoration of thick mucus, exhibiting a very purulent appearance, soon came on, and continued some days without affording relief so soon as expected. Those persons who had been previously subject to chest complaints were the greatest sufferers; a total loss of appetite was one of the most regular and common symptoms. Relapses were not unfrequent, very similar to the original attack, and as severe.

The treatment of the disease was nearly as follows; to some I gave an emetic, but to the far greater number I gave from 5 to 7 grains of the pulv. antimonialis at bed time, and repeated it for one or two nights following, if judged necessary, allowing a free use of small cooling liquids, with some mild diaphoretics, and an occasional gentle purge—if the cough was very distressing, leeches were applied to the stomach, and a blister, soon after their removal, on the same spot, avoiding as much as possible all oily and thick medicines—it was found necessary to relieve the

cough by opiates, which was very fafely done by the fyr. papav. alb. and fpt. æther. nitros. in a mixture of three parts of the former to one of the latter, by the pulv. ipecac. comp. and tinct. opii camph.—Leeches to the temples were also of service, when the pain in the head was unusually severe-some tonic medicines were afterwards given, which much affisted in restoring the general health: the above plan, in conjunction with the vis medicatrix natura, was very successful; for out of some hundreds of cases I lost only two, and those with high pneumonic symptoms, between 50 and 60 years of age, though I am forry to add that I now have two hopeless ones of phthisis pulmonalis, which the disease in question, I doubt not, laid the foundation of.

The observations I made on the progress and nature of the Influenza, lead me (I state my opinion with caution) rather to consider it not contagious by animal infection.

#### ARTICLE LXII.

From Mr. JOHN FISKE, Saffron Walden, Essex.

June 18, 1803.

The epidemical disorder commonly termed the Influenza, prevailed in this town and neighbourhood during the space of about three months. We first observed its appearance about the middle of February, and it terminated the beginning of May.

In general the fymptoms were fo mild as to require but little medical affistance, and was considered, till it became more observed, to be the common occurrence of cold. Persons above the age of maturity experienced its effects, and even to an advanced state of years. Very sew persons younger than twenty were attacked with it. Some were affected by it only for a few days, and in the more severe cases it confined them for two or three weeks. The proportion of semales was considerably larger than males. The generality of patients K k 3 under

under my care were first sensible of having received its influence by pain in the loins, nausea, head-ach, and alternate shiverings and heat, especially persons between the ages of twenty and thirty; coughing, fneezing, and the discharge of a fine limpid fluid from their nostrils succeeded. The discharge of lymph from the nostrils in one lady was so great, that she jokingly said she needed a sponge to be kept constantly at her nose, to catch it. Persons subject to pulmonary complaints suffered considerably, especially the asthmatic; and one patient of that description was attacked with the cynanche trachealis and was nearly suffocated, but recovered-he was blistered upon the chest, and over the trachea. It proved fatal to very few. In some families the generality of them had it, and some perfeally escaped.

Very few under the age of fixteen came under my confideration.

One lady, at the advanced age of eightyfix, had it, and died in a fortnight, apparently more from an infirm state, than any baneful influence of it. Many very old people recovered from it; and it seemed unconnected with other diseases, except those of the chest, which I have before-mentioned. Many that had it slight complained much of debility for a week or two afterwards, but in general recovered without medicine. Its mode of termination was quicker in those where the attack was more severe. Few experienced relapse to my recollection, to any considerable degree. The diet was as is in general directed in severish complaints. It happened more particularly to persons enjoying the comforts of life, or possibly those of a lower order shifted without application to medical practitioners in some degree.

The mode of treatment which I practifed, when called in upon the first attack, and found the symptoms of an acute nature, such as pain in the loins, head, and nausea, was to exhibit a small dose of calomel joined with the antimonial powder and made into a bolus; it generally operated upon the intestines, and upon the exhibition of a second dose, in a few hours the patients became relieved, and I had only to direct a diaphoretic draught, composed of aquammoniæ, pulv. cont. comp., &c. to be taken once in a few hours; and some expedient to

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relieve

I used no opiates. In asthmatic cases, paregoric and squills; in some blisters, and I do not recollect in any one case to have found it necessary to have had recourse to bleeding.

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## ARTICLE LXIII.

From Mr. HASKER, Woburn, Bedfordshire.

JULY 2, 1803.

I confess myself astonished when I both read and heard of the prevalence of a disease so alarming to the faculty, and so dangerous to the community in various parts of England, as the one to which the name of Influenza has been affixed, has been. I must believe what has been affirmed by credible authorities, or my own practice would induce me to suppose, either that medical men have not been perfectly accurate, or that they have exaggerated circumstances; if I may form an opinion from what has fallen under my observation.

In this neighbourhood, sickness has certainly been rather more general than in any preceding spring, but this appeared to me obviously to arise from the very variable state

of the atmosphere, some days being very warm, and others remarkably cold. Hence a variety of diseases arising from a determination to particular parts. Those which fell under my notice were either pneumonia, pleuritis, or cynanche tonfillaris, chiefly the former; both were very eafily subdued by the lancet, by flannel to the furface, and by a treatment strictly antiphlogistic. I remember but one instance in which the disease terminated fatally, and this was evidently pneumonic. The late spring has borne peculiarly hard on asthmatic persons; although the struggle has been very severe, yet the event, under bleeding and blistering, and medicines composed of squills, has been universally successful, at least in this neighbourhood.

I have had several cases of typhus at this season, as at every other, but it seemed not to have any connection with the Influenza as it is called, but was, at its commencement, either synochus, or typhus.

## ARTICLE LXIV.

From Mr. LUCAS, of Hatfield.

The Influenza appeared in Herts, certainly as early as the middle of February; and, indeed, I am perfuaded I faw it in a family of children, within a mile of Hertford, the very first day of February; the disease had with them every characteristic symptom that it afterwards discovered, and appeared clearly contagious. It however became general towards the end of the month, was at its greatest height between the 10th and 25th of March; after which time it declined rapidly, and had almost disappeared by the first week in April; none being attacked with it after that period.

I have no hesitation in declaring it contagious, as repeated instances occurred of its attacking almost every individual in a large samily in succession, with the intervention of (I think) generally two days. It also appeared

that few escaped it who were more immediately about the persons of the sick; several instances however occurred, where several in a family were attacked almost instantaneously, with sickness, or violent pain and disorder in the bowels.

The various and complicated forms, with which this disease existed in the great numbers that laboured under it, make it dissicult to describe its symptoms, which existed in every degree from the mildest, to the most aggravated state—there was however a sufficient connection between them to allow the whole to be traced to a common cause whatever that may essentially be: it seemed capable of exciting great irritation in every part of the body; rarely amounting to active inslammation, but always inducing more or less of sebrile disorder in the system, and was sollowed, almost invariably, by extreme languor and depression of the animal powers.

I shall not trespass on your time by enumerating the symptoms, or giving you in detail the mode of treatment that I employed, which was adapted to the relief of the more urgent symptoms, as circumstances pointed out, conceiving it almost impossible that any regular plan could be laid down for the treatment of a disease the most irregular possible. One circumstance, however, which I was struck with early in the course of the disease, regulated in a great measure my treatment of it, and determined me to be cautious in the use of evacuants, particularly of bleeding .-This was the uniform want of force and strength of the pulse, and very frequently there appeared no derangement of the arterial fystem at all corresponding with the other fymptoms. Under this impression, I only employed the lancet in two cases; in one, I thought it manifestly detrimental; in the other, where there were fymptoms of active inflammation of the cheft, I was disappointed in finding the expected relief from it; the pulse being as much as 150 in the minute. I believe this patient owed her life to the friendly aid of the digitalis, which had the most speedy and decidedly good effects.

There was another variety of pulse not unfrequent, this was extreme slowness of pulse, which was also weak; in several persons there were only 60 pulsations in the minute;

and in one lady, not naturally subject to flow pulse, it was at 58 for many days, and did not amount to 65 for three weeks.—This lady complained of unceasing and violent pain in the head, which was not, as usual, relieved by blisters; after a continuance of pain for about a fortnight, she was fuddenly relieved by a discharge of blood and fetid purulent matter, which issued abundantly from the nose, and, as she assured me, from the ears also; she did not, however, quite lose the pain or fense of weight, but an exceeding stupor and giddiness remained, with a total loathing of all food, except acids, a tafte very frequent in this epidemic; she was with difficulty aroused from her state of extreme languor with wine. The volatile alkali was given in substance with aromatics and bitters; the however recovered flowly, and was teazed, during her convalescence, with a great number of hard painful bumps in the scalp, and a succession of whitloes on the fingers and toes.

In the first three weeks of the disorder, cough was a constant symptom, and was for the most part extremely violent, and almost incessant. The weather having been previously

viously severely cold, and there being still, bleak north and east winds-during the last two or three weeks the cough was much lefs frequent, and very much less troublesome to the patients, probably owing to the mild weather that prevailed at the end of March, and beginning of April; and those attacked in this latter period generally suffered more in the head, stomach, and bowels. The difease, at this period, frequently assumed the form of typhus, and was protracted to as great a length as that disease; but even where the febrile symptoms terminated, as happened in the generality of cases, within a week, an excessive lowness was left behind, which rendered them incapable of the least exertion, and was removed with difficulty. Wine feemed useful in this state, and myrrh and other warm bitter medicines were also ferviceable. This state of extreme weakness appeared not so much to consist in an exhaustion of muscular power, as in a general torpor and want of energy in the system, and was probably connected with the weak state of the digestive organs, which was remarkable throughout the whole course of the disease, and was generally the last symptom that disappeared; there was in almost every case an utter loathing of animal food, and a desire for acids.

The cough, which was so general when the epidemic first appeared, was very unlike the cough of the common catarrh; the firs being more continued and violent, much refembling the hooping-cough. In one instance of a woman of an irritable habit, and in a state of debility, the cough increased to such a degree on the third day of the disease, that it literally was incessant for several hours; when it was succeeded by hiccup for half an hour, the cough then returned with the same vehemence; blifters and the ammonia ptt. in doses of fix grains, with I grain of opium every two hours, with the musk julep succeeded in removing that haraffing fymptom which had nearly hurried the patient out of the world; after some time she had a relapse, but the same means again succeeded in removing it.

I have not found relapses frequent, and in general not so severe as the first attack, being seldom more than a return of slight febrile symptoms.

Iam

I am happy to fay that in the neighbour-hood of Hatfield, though great numbers were attacked, it was not fatal, the mortality not being greater than usual. The old, and those labouring under pulmonic complaints, suffered most severely.

Within this last month, I have met with a catarrhal fever in a solitary farm-house, exactly resembling the late epidemic; cough and pain in the head being the most distressing symptoms; it was clearly contagious, having attacked every individual in the family in succession.

With the greatest respect I am,
Gentlemen, your obedient servant,
C. E. LUCAS.

July 5, 1803.

# ARTICLE LX.

From Mr. JUDSON, Ware.

July 1803.

The epidemical catarrhal fever, or Influenza, began in this neighbourhood the beginning of March last, towards the end of the month was on the decline; the patients generally attacked with slight chilliness, succeeded by heat, pain in the head, loins and lower extremities, accompanied with discharge at the nose, cough, and hoarseness, tongue white, some complained of sickness, with vomiting of bile; there were some instances of much uneasiness about the chest, with inflammatory symptoms.

One individual being affected, those resident in the same house were generally partakers of the complaint. The most favourable attacks accompanied with expectoration, many instances so slight as not to require confinement. Elderly persons, and hard drinkers,

drinkers, that did not expectorate freely, seldom recovered.

The complaint generally was relieved by gentle aperients, and diaphoretics, in three or four days—if they exposed themselves to the cold, had often fresh attack of sever becoming very tedious.

Advantage derived from an antimonial emetic, if the bowels confined, rhubarb combined with calomel; very few instances bleeding was necessary.

Blisters applied to the occiput and thorax were found serviceable. Anodynes had little effect in quieting the cough.

The fecondary attack (if I may so call it), accelerated pulse, foul tongue, restless nights, frequently delirium, with all the symptoms of continued sever; this occurred in a sew instances where the pneumonia, &c. had not been cleared on the first attack; not more than two instances proved fatal.

Children least affected by the complaint.

Elderly persons recovered slowly, light farinaceous and subacid vegetable diet most advantageous.

No epizootic complaint had prevailed to my knowledge.

Scarlatina anginosa had been very general amongst children.

Influenza did not shew itself amongst the children, either in the seminaries or work-house.

Ware, Herts.

#### ARTICLE LXI.

From Mr. J. C. ROBINSON, Cooper's-Row, Crutched Friars.

June 20, 1803.

After a severe frost of near a month, the weather became suddenly warm, with little rain and less wind; the thermometer, which had been below 20, now rose to 50. During the frost, people were unusually healthy for the season: as soon as the thaw began, there appeared a disorder very like the epidemic catarrh or Influenza, recorded and described by Dr. Fothergill and others in the Medical Transactions, in the Memoirs of the Medical Society of London, and in "L'Histoire de la Societé Royale de Medecine," of Paris.

The first cases that I saw were about the 14th February, from which time it continued to spread till the end of March, when it seemed to be at its greatest height, and then L 1 3 gradually

gradually to decline and disappear by the end of April.

Its general character was a catarrh, the fymptoms of which were chills, rigor, head-ach, fneezing, inflammation of the eyes, foreness of the top of the larynx and œsophagus, cough, tightness of the chest, white but moist tongue, pulse generally quick, weak, soft and languid, in some cases, however, hard and full, pain in the loins back and limbs, great prostration of strength and dejection of spirits, in some sudden giddiness and fainting: the bowels were generally confined; frequently, however, early vomiting and diarrhæa occurred, which appeared to prevent other symptoms, and to shorten the complaint.

Men and women were equally affected; children, though less subject to it, did not entirely escape: it seemed more generally and more violently to attack those who were exposed to the air, especially in the night. In some families it affected several persons within a few hours, in others in succession after an interval of some days. From these facts it appeared to me to be in its nature contagious, though it was communicated more generally

and more violently by the influence of the atmosphere.

I may also remark, that as many doubt its being at all contagious, it could not be very powerfully and decidedly so; and yet it spread through this and other countries with a uniformity, violence, and rapidity, which never happens to any of the most active contagions uninfluenced by the atmosphere. Hence I conclude, though it might be, and often was communicated by contagion, yet that the atmosphere was the general fource of the disorder.

As this complaint was not often attended with inflammation, neither did the fymptoms require bleeding, nor did the weakness and dejection of spirits seem to allow it. Yet where the head was affected with violent pain, or giddiness, cupping and leeches I employed with safety and advantage, and in a few young persons, where the catarrh was accompanied by evident symptoms of pleurisy, bleeding in the arm was equally serviceable. The remedies which I used were few and simple: seeing in some of the first cases the good effects of early and spontaneous evacua-

tions, I gave a few grains of calomel and antimonial powder at night, and a folution of Epfom falts in the morning, which were repeated once or twice if necessary: afterwards faline and antimonial medicine, emulsions, opiates, and expectorants for the cough, fometimes a blifter to the head and cheft, keeping in bed two or three days; diluting drinks, and nourishing broths, formed the plan of treatment. Recovery was fometimes flow, and required the aid of bitters. Relapses were not frequent, but in some this disorder left a strong disposition to consumption.

Upon the whole this epidemic appeared to me a flight complaint, and feldom fatal, except to the aged and infirm. One circumstance remains to be noticed. This Influenza seems to have superfeded or deferred the usual diseases of the spring, as the measles and searlatina: this is recorded by Lorry to have been the case in the epidemic catarrh that prevailed in France, in 1775, but he adds that during the summer these complaints appeared with more than usual violence and fatality.

# ARTICLE LXII.

From MARTIN WALL, M.D. Oxford.

June 10, 1803.

- this city and the neighbourhood, far and near, affecting, with more or less severity, almost every person in every family, in many points resembling the vernal catarrh which prevails more or less every year, but in this instance more early, and infinitely more general, and marked by some peculiar symptoms.
- 2, 3, 4. From the infidious manner in which the epidemic came on, it was almost impossible to set down the precise date of its first appearance here. I think it was about the latter end of January. It rose to its greatest height, or most general prevalence, about the third week in February, continued in this state nearly to the third week in March, when it began gradually to decline.

5. It commonly invaded very suddenly, with languor, rigor, gaping, debility, violent pain in the head, constriction of the chest, cough, commonly dry and harsh, succeeded by heat, quick pulse, white tongue, and the common series of febrile symptoms.

In many cases there appeared, most clearly, an affection of the biliary system, and probably of the liver itself, evinced by yellowness of the skin, and particularly of the eyes, and a sense of fullness below the ribs on the right side, with high-coloured urine.

It was often attended with severe, but irregular pains in the loins, legs, and thighs, &c. The debility induced by the first attack, and aggravated by its continuance, was so extraordinary, as to produce almost the appearance of fatuity, with extreme dispiritedness and despondency.

Most persons felt a degree of soreness in the throat; the fauces, tonsils, and velum pendulum palati were almost always redder than usual and swoln. I never saw any ulcerations, or aphthæ; but very frequent instances of tough viscid mucus, which it was difficult to get off by the common efforts of spitting and expectoration; and, when detached, the mucus was frequently tinged flightly with blood, and left the part fore.

6. The symptoms seemed more to vary in degree than in character; and assumed a new form, whenever they were influenced by constitutional circumstances, by previous disposition to peculiar diseases, or by singular idiosyncrasies.

What is here faid will apply equally to the cases of individuals in every single family.

- 7. In general it may be faid, that it was rarely fatal, when unconnected with other difeases.
- 8. Though the epidemic itself seldom seemed to have a fatal termination, yet the number of deaths has, in this neighbourhood, greatly exceeded that of any former years, clearly proving, that the Influenza has had no small share in producing these numerous instances of fatality: but it deserves particularly to be remarked, that just before the appearance of this complaint, during its reign, and since its decline, sudden deaths, apoplectic, and paralytic disorders have been uncommonly frequent here.

9. I believe no class of people, nor any peculiarity of constitution was secure from the attack of the epidemic: but children more generally escaped it.

of fex made any difference in the mode of attack, or the violence of the diforder.

11, 12. The best mode of medical treatment of this complaint, according to my obfervations, confifted in the early employment of antimonials and calomel, in small and repeated doses, so as to act gently on the whole alimentary canal; the patient, if the disorder was violent, being confined to his bed .-Diaphoretic saline draughts were sometimes given, but I think without any positively good effect. Demulcent, pectoral, oily, mucilaginous, emollient mixtures and electuaries, which the cough feemed to call for, appeared to me to do harm, by stuffing up the bronchia and impeding respiration: even the use of opiates, so urgently solicited and apparently indicated, was at best dubious. They did not feem effectually to allay the irritation, they increased dyspuces, they produced confusion of the head, and costiveness. In one patient,

patient, a lady of a very weak habit, a few fpoonfuls of fyr. pap. alb. taken by her own directions to allay the cough, very nearly produced fuffocation. In feveral other cases of similar constitutions I witnessed similar effects from opium. After the first two or three days some light tonic, (and I found none so good as the infus. quassiæ,) with small doses of lac ammoniæ, with or without the saline mixture, according to the degree of heat, and quickness of pulse, produced the most beneficial effects, relieving the breast, and restoring appetite and strength. The cinchona did not act so favourably, at least in the cases where I tried it.

The great debility, which prevailed in every stage of the disorder, prevented me from employing the lancet at any time. It had been sometimes used, before I was called in to the patient, but I never recommended the repetition of its use, except in a few cases which were decidedly pneumonic.

Blisters were more frequently and safely employed, but in general were not required, except in complicated cases.

- abstemious diet of farinaceous vegetables; but watching the debility carefully, and ordering wine, if I saw the strength and vigour still more impaired: and in some such cases wine and a more generous diet succeeded remarkably well.
- 14. Small, close, hot, rooms were always injurious. Many received great benefit by opening the windows, or permitting them to go into the air.
- 15. The febrile fymptoms gradually abated, leaving no mark of difease, but a great degree of lassitude and dejection for some days, which yielded to light tonic medicines, a more generous diet, and exercise in the free air.
- 16. I had not occasion to remark many instances of relapses. Those which I did see were milder than the original attack. In some persons the disorder seemed to remit for a few days, and then a new exacerbation (and that repeated 3 or 4 times) took place, which may be supposed to have been a continuation of the first disorder.

- 17, 18, 19, 20. What I have said on the immediately preceding questions, will convey my remarks relative to these four heads of your inquiry.
- 21. Phthisical and pneumonic complaints, and rheumatic affections were the principal concomitant disorders, which appeared to combine with the epidemic. The former affumed very alarming appearances, and the conclusion was often fatal, or the patients still continue in a state, which is attended with little hope. The rheumatic affections were fevere, but short, and the recovery perfect. We had also in this place several instances of disorders in the bowels, colic with constipation, &c. but these seemed to me to be accidental. I have before noticed, as a concurrent circumstance, that cases of sudden death, apoplexy, and palfy, have been very frequent in this town and neighbourhood, during the last 6 or 7 months.
  - 22. This question requires more evidence than I have been able to acquire, for the formation of a decided opinion. With deference I venture to observe, that though the complaint might sometimes seem to be contagious,

tagious, from a mode in which it attacked persons in the same family, who lived constantly in the same rooms, and slept in the fame bed; yet in general it did not appear to be propagated by contagion, but by an influence of the air, not unlike that which is at this very time spreading its blighting effects through the woods in this neighbourhood. The preceding feafon may have predifposed to disease, certain tribes of vegetables, particularly the elms, and the blighting air now acts upon those most predisposed with full influence, fo that in many places all the leaves are destroyed, as if by actual fire. Other trees more strong have been less injured, and some in every wood continue in perfect health and verdure. I presume to advance this only as an illustration.

- 23. I had no opportunity of making any remark, that can illustrate this question.
- 24. It happened in some families that three or four persons were attacked all nearly together; others afterwards successively, hardly one escaping, but without any regular or equal interval interposed.

- 25. The situation of the places where I have attended patients under the Influenza is very various, the circle of medical practice round this place being very wide. The local circumstances of places must therefore differ greatly.
- 26. The country in which our practice chiefly lies is exposed to every wind that blows, but Oxford particularly to the northeast, north-west, and south-west.
- 27. I had not leifure to remark the progress of the epidemic, the hurry of business which it caused, being beyond what was remembered by the oldest practitioners in this neighbourhood, keeping us in perpetual exertion, night and day, for several weeks, especially in the months of February and March.
- 28. It may be remarked that the weather, in the last months of the year, especially November, December, and the beginning of January, was particularly mild, soft, and relaxing in this kingdom. Though we had frequent accounts from the Continent of the frost, and that the Elbe, &c. were frozen up, the climate here continued open and mild, and the wind south-west, or north-west till about Vol. VI. M m

round to the east, and a severe frost took place, and lasted, with occasional intervals, to the third week in February. Very little snow fell, but a good deal of half congealed sleet. It may be imagined that the soft warm weather of the earlier part of this period, gave that relaxation to the human frame, which formed the predisposition for the new disease, when the east wind imported it from the Continent, and forwarded its malignant influence by the coldness of its blast, operating upon the relaxed sibre—For,

in France, especially at Paris, and in some of the northern departments of the Republic, and in Holland long before we experienced it here. It was prevalent in those countries, while the wind being here in the westerly points, prevented its importation, till the wind went round to the east and north-east, where it continued more or less for many weeks. Hence probably it was, that it prevailed more early in London than in this part of the kingdom, and in this neighbourhood more early than in Lancashire, the western, and

north-western parts of the kingdom. If this remark should be strengthened by other obfervations, it may seem to shew that the progress of the disorder followed the direction of the wind.

- 30. I very well remember several epidemic catarrhs, but none so perfectly as that of 1782, as I suffered severely from it. There was a great analogy between that disorder, and the object of our present inquiry, but in some circumstances they differed greatly. epidemic of 1782, prevailed in May and June, and it was more decidedly marked by fymptoms of coryza, fneezing, weakness of the eyes, pain in the chest preceding the cough; but I do not remember that there was any sign of affection of the liver, or biliary secretion. It was attended with the same debility as the late epidemic, perhaps even more remarkably and fuddenly, in some instances, than this. The use of the lancet was then very injurious, and in general wine and cordials were not only admissible, but necessary.
- 31. I do not recollect that any disease prevailed amongst quadrupeds, or domestic birds, previously to either of these epidemics.

If

If the remarks here offered can be of the least use to the Society, I shall be very happy. At any rate it will be a source of satisfaction to me to have been able to attend to their request, and to shew the respect I entertain for them individually, and in their collective capacity.

I remain, Sir,
Your very obedient fervant.
M. WALL.

# ARTICLE LXVII.

From JAMES WOODFORD, M.D. Almsford.

JUNE 10.

Question 1. No other epidemical disease has appeared in this neighbourhood, during the present spring; and exclusive of the Influenza, there have been fewer diseases than common.

- 2 and 3. The first well marked cases falling under my observation happened in the beginning of March, and it attained its height the beginning of April.
- 4. It still continues in a sporadic form; and with as great (or greater) feverity than on its first appearance.
- 5. The disease commenced with rigors, often severe, and lasting several hours, or with chilliness, followed by feverish heat, and accompanied with vertigo, head-ach, pains in the limbs, but especially in the back and loins, and at different times in almost all parts of the Mm 3 chest,

chest, with an oppression and sense of stricture about the præcordia, great and fudden general debility, with anxiety, restlessness, and depression of spirits: a frequent dry cough with fneezing, and a thin acrid defluxion from the nose, a watery discharge from the eyes, which were often red and inflamed. The tongue white in the middle, or with a brownish fur, but moist: at the edges moist and clean, thirst moderate. The functions of the alimentary canal generally difordered by fickness, vomiting, or diarrhœa. The pulse was from 80 to 100, soft and rather full, but seldom strong and hard. The urine was generally high coloured, with a lateritious sediment; scarcely any sleep during the first days of the disease. The pains in the chest, or sides, were often very acute and violent, much increased on coughing or on any motion of the body; but they seldom continued long fixed in one part, and though increased on making a full inspiration, were certainly not attended with that great and permanent dyspnæa, so usually attending genuine pneumonia. A total loss of appetite commonly occurred with a loss of distinction of tafte. 7 10

ftrictly pathognomonic or characteristic of the Influenza, than sudden prostration of strength, and depression of spirits. These were always evident, even when the other phænomena were very slight.

- 6. The disease varied extremely in individuals of different ages, and constitutions, but were pretty uniformly the same in those of similar ages and constitutions.
- 7. I have seen no fatal case of Influenza, when unconnected with other diseases.
- 9. The middle aged, and those between 50 and 60, of robust and plethoric habits, accustomed to vinous or spirituous potation, or to the inclemencies of the atmosphere, suffered most severely. Young children for the most part had a mild disease.

treated by confinement to the house or to bed, by the liberal use of diluting cooling liquids, emetics, purgatives, and diaphoretics. In cases attended with pulmonic congestion, or inflammation, an early and moderate v. s. i. e. 3x or 3xj. with repeated blisters, and antimonials at the usual intervals, never failed

to afford great and speedy relief. In every instance the bleeding was borne easily, the blood appeared fizy and often presented the cup-like appearance. In some cases bleeding was repeated a fecond and a third time with evident relief: this was done, even in a man aged 75, but who was of a full plethoric habit. I have reason however, to think, that, notwithstanding the above effects of bleeding, they might often have been superseded by repeated blistering. Emetics were frequently indicated from spontaneous vomiting, and they often had the best effects in rendering all the fymptoms milder; fo had purgatives, which were likewise often required for costiveness, 2 or 3 grains of calomel, with 6 or 8 of rhubarb, and followed by inf. fenn. c. natri tartariz. zii. val ziij. commonly answered these intentions.

A warm general and moderate perspiration, at the commencement of the disease relieved, all the symptoms, especially the pains, dyspnœa, and oppression about the chest: in some, antimonials produced these essects: in others, the saline, neutral salts, and particularly the aq. ammon. acetat.—Prosuse sweets

funk

funk the patient, and aggravated all the fymptoms. Opiates in any form were hardly admiffible before the fubduction, or a great abatement of the inflammatory fymptoms: then, united with light tonics, and expectorants, they abated the cough, procured rest, and restored strength. The inf. gentian. composit. or inf. quass. with muriatic acid, answered with most.

Broths made by boiling animal and vegetable substances in water, were particularly indicated at this period; as also the allowance of two or three glasses of wine, a-day.

- 15. It generally terminated by a free and copious expectoration of viscid phlegm, and yellowish mucus; at least when such an expectoration happened, the disease soon disappeared.
- 18. Convalescents recovered very slowly, complaining for some time of langour and debility of body, with lowness of spirits, and an impaired appetite.

By gentle exercise in the open air, a light nutritious diet, with tonics, and a moderate use of wine, perfect health was at length restored.

- apparently predifposed to phthisis, it never failed to increase and call into action the latent seeds of that disease; and in several instances to induce speedily a confirmed state of it, which quickly proved fatal. Of this I saw one case a few days since. It was a female aged twenty-three, and born of consumptive parents; but who at the time she was seized with Influenza three months ago, was free from any evident phthisical symptom.
- 22. This malady attacks so many at the same time, and is so widely diffused that I think we must ascribe its source to the state of the atmosphere.
- 24. In some families I have seen several attacked nearly or quite at the same time: in others again in succession. I have also seen instances of a husband, or a wife only being ill of it.
- 26. The places in which I have made my observations are exposed chiefly to the south-west, west, and north-west winds.

# ARTICLE LXVIII.

From Mr. BUSH, Frome.
SEPT. 10, 1803.

The Influenza appeared in this neighbour-hood about the beginning of March, it attacked many persons during that and the succeeding month, and till about the middle of May, when the number affected was less, and the symptoms appeared milder, yet several persons were ill of the disease in its genuine form in July.

The distemper was ushered in by considerable langour, followed by slight shiverings, accompanied with heaviness and pain in the forehead, sometimes the pain was confined to one side of the head, frequently with redness of the tunica conjunctiva, and a discharge of lymph from the eyes. The fauces were affected with soreness and redness, but in a few instances only, so as to be a distressing symptom.

fymptom. The pulse was considerably harder than natural, not full, and generally between 90 and 100 beats in a minute, but more accelerated towards night.—The tongue was covered with a dry whitish fur in the middle, and with red moist papillæ on the edge; in a few instances where the symptoms were fevere, the tongue exhibited a browner hue in the middle, but the florid studded edge was pretty uniform. Pain and stitches about the muscles of the diaphragm, and hard cough came on a few hours after the accession of febrile symptoms; the urine was high coloured and without fediment; the cough continued to increase, and on the third or fourth day a very copious exputition of a whitish mucopuriform matter came on, which did not afford that relief experienced by free expectoration, in common catarrh. The pain about the chest continued to increase, and was only fubdued by the application of blifters, and leeches, and in many cases both were necesfary.

Diaphoresis was easily excited, but not attended with any immediate relief. The disease ran on a fortnight, or even a month,

when the irritation of the cheft, and febrile fymptoms went off, the exputitia diminished, the urine deposited a small quantity of whitish fediment, and the patient began to experience convalescence, but the advances towards health were commonly very slow.

In many instances the first symptoms the patient complained of were lassitude and dyspepsia, which was described by the sick as want of appetite, attended with rambling and uneafy fensations about the præcordia, and a twisting of the bowels. If cathartics were given at this period of disease, it was arrested in most instances, or rendered so mild as to require no other remedy than a repetition of the laxative. I saw the distemper several times combined with acute rheumatism. Emetics were useful, if given before the inflammatory symptoms of the chest came on; if they had made their appearance, mild laxatives, and an aqueous regimen were proper; acetated water of ammonia, squills, and opium, were variously combined, and seemed to afford occasional relief. General bleeding was not used in any instance. Opium given in confiderable quantity alone increased the tightness

ness of the chest, and aggravated the pulmonic affection; but the same effect did not follow the use of it when combined with squill, ipecacuanha, or antimony. Persons of all temperaments, ages, and classes, as well as of both sexes were indiscriminately affected.

Relapses were frequent and differed little from the original attack. It frequently happened that several individuals of the same family were ill of the disease at the same time, but it more frequently occurred at intervals of ten days, or more. I cannot help attaching the idea of contagion to this distemper.

The fatality of this complaint was but trifling, I lost only one patient, (a man aged 63,) out of nearly 200.

### ARTICLE LXIX.

From Mr. J. C. MELHUISH, Tiverton.

August 18, 1803.

The Influenza first appeared in two of my patients, one of which refided in this town, and the other about a mile fouth-east of Tiverton, on the 23d day of March last. After having been very general about a month, it subsided almost immediately after the change of the wind from the east, (in which quarter it had almost constantly been from the time above-mentioned,) to the west and south, and the subsequent rain, without recurring in any fingle instance.—It appeared to me as uniformly endemic, and in many cases epidemic. I recollect the former Influenza, (some years fince,) which seemed a compound disease of catarrh, and peripneumony, the first rather predominating; in the late disease, (in my opinion) a compound disease also, of catarrh, peripneumonia notha, and sometimes inflammatory fore throat, the second was most predomidominant. An intermittent tendency, was also very observable in some instances, but it never continued so as to require the use of the bark.

I found the pneumonic affection in this difease infinitely less dangerous than when the peripneumonia notha is less frequent—for though three instances in this neighbourhood occurred, where two in each house died, yet these were old persons, or of very bad stamina, and in a bad state to meet the disease.

Upon the whole, I found it much less dangerous than from the severity of the symptoms I had at first apprehended.

I had only two cases in which I bled, in one of which the patient was accustomed to bleeding every spring, the other highly plethoric, but each recovered.

I always treated this disease exactly as the peripneumonia notha, except that opium, (at night,) which I have so often given with the greatest success in this disease, unfortunately had the contrary effect in the Influenza.

Previous to, or during the prevalence of the disease, I did not notice any epizootic complaint.

# ARTICLE LXX.

From Dr. KINGLAKE, of Taunton.

July 4, 1803.

A catarrhal affection of unusual violence, has raged epidemically in this town, and neighbourhood. It occurred to me to see, and direct a well marked case of this influenzal malady, so early as the fifteenth of last January. It did not become remarkably prevalent until the latter end of February, and during the month of March. Its increasing frequency, and rapid propagation, then gave it its definite character and denomination.

It was most rife in the months of April, and May, when it feemed to have attained its acme, both with regard to violence, and extension. No case of the complaint has fallen under my professional care since the fourth instant, yet the disorder, though apparently verging on extermination, is not yet quite extinct. Even almost to the present day, it VOL. VI. Nn Thews

shews itself very characteristically, but so rarely, as to have lost its epidemic title.

Its characteristic Symptoms.

Its most prevailing description of symptoms was a sense of diminished temperature, denoted by transient chilliness, occasionally proceeding the length of violent and durable shivering, succeeded by febrile heat, cuticular dryness, hard, rapid, moderately full pulse, inflammatory determination to the mucus membrane, investing the fauces, trachea, bronchial tubes, and nostrils, inducing strictured breathing, pain in one, or both sides, sometimes directly under the sternum, across the chest, or more particularly in the region of the heart, painful cough, mucus expectoration, discoloured and dry tongue, often accompanied with apthous erofions, craving thirst, high-coloured urine, and not unfrequently a total loss of smell and taste. The more urgent form of symptoms was a general aggravation of the preceding, with the addition of nausea, aneurexia, bilious vomiting, and purging, icteric discoloration of the skin, laborious breathing, bloody expectoration, epistaxis, muttering delirium, and extreme depression of mental energy.

The number and external character of these symptoms varied considerably in different individuals; but in no instance in my observation, was the catarrhal basis wanting to distinguish the peculiar nature of the disease: nor did an undeviating uniformity mark its course in members of the same family, though of nearly equal ages, and apparently, of similar constitutions. Inscrutable diffimilarity of temperament countervailed any affimilating influence which confanguinity, equality of age, and constitutional refemblance might exert, and appeared in corresponding diversity of features. It feems to have made a deeper, and more untractable impression on the male, than the female constitution.

It has not in my opinion been necesfarily fatal in any instance, when unconnected with other diseases, and appropriately treated.

My experience happily disables me from making any estimate of its proportionate fatality, having in a considerable number of patients seen but one only who died, and in that solitary instance, dissolution was too

nearly,

nearly, and irrefishibly approaching at my first visit, to afford any chance of rescue.

No age, class, or constitution, was exempt from its attack; but it appeared to me to fall more constantly on the adult, than an earlier age, and most violently, on the old, the asthmatic, and the irritable temperament.

Females seemed to be more obnoxious to the disease, than males.

# Its Mode of Cure.

The most successful treatment was a close adherence to what is termed the antiphlogistic plan, with respect to diminished temperature, free ventilation, and copious dilution, with cold, slender liquids, in small portions, at short intervals. When the disease was seasonably checked by cooling management, no indication occurred for the employ of bleeding, whether general or local, emetics, purgatives, or opiates.

Sudorifics and blifters, under circumstances of severe inflammatory pain, and determination to the lungs, proved highly salutary, and, in general, much security from relapse was afforded, either by the renewed, or protracted irritation of blifters.

The most appropriate diet was the lightest, and least stimulant. Previously to the commencement of convalescence, the most suitable sustenance was barley water, oat gruel, chicken broth, beef-tea, and at farthest, a slightly boiled egg; these were advantageously taken in small quantities, at short distances; they sufficiently resisted the increase of direct debility, without hazarding its indirect production by undue excitement.

A cold temperature was highly gratifying and beneficial. From forty to forty-five of Fahrenheit's thermometer would have been desirable; but the variable heat of the atmosphere precluded the advantage of this uni-The thermometer often flood form coolness. at about fifty in exposed situations; but in the apartments of the fick, no injunction or remonstrance could prevent its frequently afcending to fixty and upwards, by shutting the windows and doors, or even kindling fire in the bed-room: whenever the latter indifcretion was committed, the aggravated fymptoms of the patients foon became fufficiently evident to induce an anxious wish to return to

the composing influence of a cooler temperature.

The disease usually terminated in a gradual abatement of every febrile symptom, particularly the removal of painful and oppressive determination to the chest, an equal distribution of the circulating sluids, steady uniformity of sensual temperature, deepened cough, and copious expectoration of viscid mucus. The recovery of smell and taste, especially the latter, were the last, and often very late, in the arrear of convalescence.

Relapses were very frequent, even in desiance of suitable precaution.

The symptoms of relapse were similar to those of the original attack, with the difference of being in general much less severe.

The progress of convalescence was, in most instances extremely slow, and tedious. It was usually accompanied with an insuperably vexatious cough, and occasionally with abundant expectoration, and nasal discharge of heavy, yellow, offensive mucus. Under these circumstances, pulmonary consumption was formidably threatened, and in some instances,

stances, the incipient stage of that destructive malady, appears to have been actually entailed.

The treatment which proved best adapted to obviate serious consequences, and to insure a salutary issue, consisted in guardedly avoiding an abrupt return to a sull stimulant diet, unduly heated apartments, and too much bodily exertion. A small quantity of nutriment, at short intervals, abstinence from sermented liquors, tranquillity, and the uniform support of a derivant degree of irritation on the chest, either by vesication or rubefacience, powerfully conduce to the most favourable termination.

Stomachic and tonic medicines were not often either necessary or admissible, as the return of appetite and vascular tone was, in general, foremost in convalescence, and the stimulant effects of agents employed in those intentions, were contra-indicated by the morbid remains of pulmonic irritation.

# Its Origin.

The influenzal epidemic did not in my obfervation either distinctly induce, or mingle its character with other disorders, except the N n 4 modificamodification which it received from an asthmatic, tubercular, or any other diseased state
of the lungs; and in this complicated affection,
could be recognized no more than additional
violence and obstinacy, in the superadded
distemper. On some occasions, indeed, an
icteric hue tinged the skin, and the various
secreted shuids; but this appeared to arise from
a subordinate derangement of the hepatic
function, and did not essentially interfere with
the specific influence of the reigning malady.

The contagious power of the disease appeared to me to be unequivocally decisive, its propagation being, in most instances, distinctly traceable by personal intercourse.

In populous affociations, where personal intercourse was unremittedly continued, the disease became general at the same time; or at least occurred in rapid succession.

This simultaneous prevalence of the disease was strikingly exemplified in large samilies; indeed so universal was its reign in some instances, as to make the private dwelling assume the dreary appearance of a temporary hospital.

My observations have been chiefly confined to an extensive vale, rather of a sandy soil, moderately wooded, plentifully watered, and well drained; exposed to the east, and west winds, and sheltered from those of the north, and south.

The disorder occurred in a desultory manner in this neighbourhood, prior to either its metropolitan or provincial prevalence having established its epidemic character. From its first appearance in this town and vicinity, it indeed continued to spread; but the course of its personal propagation was not so evident, as when its increasing disfusion had multiplied the sources and channels of its contagious influence.

Instances abound of whole families becoming infected in consequence of a distempered individual, either inmating with, or transiently visiting them.

For many months previously to this epidemic, the very variable course of atmospheric temperature was notorious to common observation. The unsteadiness would indeed at times run through a vast range of heat. An interval of twenty-four hours would often present un-

feasonable extremes, from the freezing point to fifty of Fahrenheit's thermometer. The hurtful violence which these contrasted states necessarily inslicted on the sentient and irritative powers of the system, was exasperated by the rapidity of transition from the one to the other.

This very variable temperature affords a cause fully commensurate to the effects which have arisen in the motive powers of health, and which have been characterised in the epidemic catarrh of the season. Irregular temperature soon induces inequality in the distribution of the circulating sluids, which operating as a morbid excitement on the system, produces the sebrile sensations of distempered cold and heat, of relative desiciency and plenitude; with such visceral determination as the joint influence of associative and organic susceptibility may savour.

The motive laws of the animal occonomy have so intimate a connection between the cuticular surface, and the mucus membrane investing the bronchial tubes, trachea, &c. as to induce the most prompt participation in each others affection. Hence the diseased impression

perature, is but too apt to be precipitated, together with the confequent commotion of the fystem, on the lungs, or rather its aerial membrane. The local establishment, the disease here obtains, will soon specifically vitiate vital action, and cause it to evolve a halitus, or motive power, capable of impressing its own peculiar nature, in suitable circumstances, of organic susceptibility. In this mode catarrhal affection usually originates, which becomes more or less extensive in proportion as the severity of the disease generates, concentrates, and diffuses its contagious power.

It is difficult to conceive that any atmofpheric fource of contagion can be sufficiently extensive to give effect to an epidemic disease. Before this could happen, the constituent principles of respirable air must be decomposed, which would probably put an instant period to every description of animal life. Temperature is the only condition of the atmosphere capable of general influence. Its extraneous matter, however noxious, is infulated, and can act but partially. Animal action is necessary to endue it with specific,

or contagious power, and personal intercourse is requisite to its propagation. The history of the plague, and every variety of epidemic disease sufficiently evinces, that in whatever physical circumstances these distempers individually originate, they owe their dissemination to the impressive power of personal contagion.

The direction of the wind does not appear to have much influenced the extension of the disease. The contagious power has required the application of its undiminished force to become efficient. When reduced by aerial dilution and diffusion, it has been too desicient in requisite energy to excite the epidemic affection. No satisfactory proof has occurred in my observation of the atmosphere having been the general vehicle of contagion, while its personal distribution has been notoriously obvious.

My recollection of the Influenza which raged in the year 1782, warrants me in faying that it bore a very near resemblance to the late epidemic.

No epizootic complaint was remarkably prevalent in this neighbourhood previously to the occurrence of the late Influenza.

The

The ample experience afforded by the frequent recurrence of epidemic catarrh, has established the important fact, that the disease has been invariably of an inflammatory nature, and that it will always be appropriately, and probably successfully, combated by cooling, and anti-stimulant treatment.

An effectual prevention of this malady is less likely to be obtained, than a secure repression of its violence, by an early institution of the suitable means of cure.

Whether fumigation with acids, or any other fubstances, can destroy catarrhal contagion by inducing chemical changes in the arrangement of the morbid power, is yet too doubtful to be implicitly relied on, and until the question be decided, its adoption should neither superfede the employ of the certain prevention, by avoiding personal intercourse with the affected when practicable, nor the alleviating utility of an abstemious and anti-inflammant regimen, both before and after the attack of the disease.

Your questions are well adapted to obtain the most useful scientistic and practical intelligence on the nature and cure of the late, as well Well as other kindred epidemic distempers. Much diversity of opinion will probably be discovered on this interesting inquiry, particularly on personal and aerial contagion, yet it may be presumed there will be leading agreement and resemblance, sufficient to rest the cause of truth on the clear induction of concurrent sacts.

## ARTICLE LXXI.

From WILLIAM WOOLCOMBE, M.D. Plymouth.

Query 1. The epidemic catarrh, usually called Influenza.

- 2. On the 2d of March, in a family confisting of eight persons, all of whom had the disease successively in the space of a sew days. The first case at the Public Dispensary did not occur until the 18th of the same month, by which time the disease was very generally prevalent in the town.
  - 3. During the last ten days of March.
- 4. The last instance of attack, which I met with, occurred on the 12th of May, but very few cases had occurred during the preceding part of this month.
- 5. Superadded to the more common febrile and catarrhal fymptoms, there subsisted an extreme degree of debility and languor, apparently very disproportionate to the other symp-

fymptoms; a confiderable foreness of the muscles, increased by slight pressure, was also a frequent and troublesome symptom.

- 6. The symptoms varied considerably in number and degree in different individuals. No prevailing similarity of symptoms appeared to me to subsist in the relations stated in this query.
- 7, 8. The very few instances of death, which I could attribute to it, occurred in perfons of advanced age, previously liable to pulmonary affection, particularly of the asthmatic kind.

Of forty patients admitted at the Dispensary one died.

- 9. Children appeared to be less obnoxious to the disease than adults, and when seized, to have the complaint more favourably.
- 11, 12. The effects of bleeding, general or local, came not within my observation. Mild emetics were of service at the commencement of the complaint, and occasionally during its progress; but from the inordinate and indiscriminate use of James's powder, I have reason to think, in many instances, that the leading symptoms of the disease were aggra-

vated, and its duration protracted. Laxatives, sudorifics, anodynes, were occasionally useful, but these remedies seemed to me to have less effect in relieving the particular symptoms against which they were directed, than might have been expected either from the degree of those symptoms, or from the usual effects of such remedies, employed on account of analogous symptoms in other diseases.

- 13. In mild cases little variation of diet seemed necessary, and in those of a severer kind, there generally subsisted a very strong objection to sustenance of every sort.
  - 18. Recovery was very far from rapid.
- 19. In those persons in whom the symptoms of the disease had occurred only in a slight degree, considerable lassitude and languor long continued; but where the symptoms had at first been more severe, the consequent debility and languor were often protracted to a considerable space of time.
- 21. Pneumonic inflammation was the diforder, which appeared most frequently in combination, and from which, almost exclusively, was danger to be apprehended, with the exceptions stated 7, 8.

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22. The

22. The evidence detailed in the histories of former epidemics of this kind appears to me to preponderate in favour of the opinion, which attributes the propagation of this diforder to contagion. Nothing has occurred in the course of my own observation on the progress of the late epidemic to induce me to abandon this opinion, which has received confirmation from the apparent introduction and progress of the disease in particular fami-In the family mentioned in the answer to query 2, the disease appeared many days before it was prevalent, or, to the best of my information, known in this town; and proceeded to attack in fuccession every individual of the family.—It is difficult to conceive that every one of eight persons composing one family, should be more disposed than the rest of his neighbours, to be acted upon by an influence, to which all were in common exposed; at the same time, I confess myself unable to show by what means the supposed contagion was introduced into this family, in the master of which its influence was first apparent.

- 24. Generally persons in the same house were affected in short succession to each other; yet to this strong exceptions certainly occurred, sometimes several being affected at the same time, and sometimes certain individuals escaping the disorder when most prevalent in the house, and yet having it at a subsequent period.
- 25. In the town and neighbourhood of Plymouth.
- 27. The disease I am inclined to believe prevailed in the populous towns of Plymouth and Dock, before it became general in the country around, or in the villages, in the vicinity; but on this point I have not sufficient information to speak with confidence.
- 29. The progress of the disease was west-ward; but its appearance, in particular places, did not correspond uniformly to this direction. The wind, some time previously to its appearance, and during its prevalence, blew very generally from the east.

During the prevalence of this epidemic, I observed, with some surprise, that the complaints of consumptive patients, in the vari-

ous stages of phthis were not apparently affected by it, in the slightest degree. Nor has phthis been more frequent since. I have met with one instance only of this disease originating in the Influenza.

## ARTICLE LXXII.

From Mr. HARPER, of Gosport.

- 2. About the 10th of March.
- 4. Last patient about the 30th of March.
- 6. Did not vary in the same family, equal age, fimilar constitutions, and different sexes, but when combined with peculiarity of constitution.
  - 7. No.
  - 10. No observable difference.
- 11. No other medicines necessary than mild diaphoretics. None given, but mist. falin. with fpt. æther nitrof.
- 12. No occasion to bleed, either general or local, to give emetics, purgatives, opiates, or use blisters.
  - 14. Moderately warm.
- 16. Sometimes a relapse—one so late as April 11.
- 17. Similar fymptoms, yielding to the same mild remedies.
  - 18. No-quite the reverse 7 Several at this time 19. Debilitated (June) not recovered from its effects.
  - 20. None necessary

21. The

21. The diseases at this time fatal, were peripneumonia notha, and phthisis.

Several cases of catarrh previous, during, and after.

The peripneumonia more severe than usual, perhaps, aggravated by the epidemic; but the weather at the same time peculiarly unfavourable.

- 22. Whole families affected.
- 23. In a school of about 80, only four applied for relief.
  - 24. In succession, at a few days interval.
- 27. Places in the neighbourhood before and after, much more feverely.
- 28. From the 12th of February, (except the 20th north) to 1st March, wind west to south-west.

From 1st March to 14th north-west to north-east and east, 14th and 15th west, 16th east, 17th to 21st south-west, and west, then easterly to 25th. Afterwards variable.

- , 29. Not followed the direction of the wind, but affected by the northerly winds.
- 31. Have not heard of any disease in any animals, since September and October, when a disease in cats.

STATE of the Thermometer, Barometer, Wind and Weather at Gosport, in the County of Hants, taken at Ten o'Clock in the Morning of each Day 1803.

FEBRUARY.					
Day	Yay Ther. B.rom. Wind and Weather.				
1	38	30,35	N. Tolerably fine.		
2	40	30,1	N. W. Cloudy, afternoon fine.		
3	37	29,6	N. W. Fine at times, but some wind.		
4	32	30,18	N. E. Very fine.		
5	32	30,1	E. Very fine, some fog in the morning.		
6	37	29,5	W. Some little fnow in the night, rather inclined to rain with wind. Afternoon wind north.		
7	35	29,54	N. Some wind, a little fnow in the night and evening.		
8	32	30,	N. E. Cloudy, fnow early in the morning.		
19	35	30,2	N. W. Fine.		
10	36		N.E. Very fine.		
II	32	30,53	N. E. Very fine.		
12	33	30,5	N. E. Foggy at nine, A. M. Thermometer 28.		
13	44	30,04	W. Rainy.		
14	40	29,87	W. Some frost in the night. Some rain early in the morning.		
15	44	29,55	W. Some wind, cloudy. Some rain.		
16	44	29,48	W. Some wind, fine at times.		
17	44	29,66	W. Windy and cloudy, rain at night.		
18	44	29,6	W. tolerably fine and calm.		
19	44	29,77	W. Afterwards fouth west, very fine, then rain and windy.		
20	45	29,5	N. Cloudy.		
21	40	29,74	W. Rainy.		
22	40	30,14	W. Very fine.		
23	45	30,3	S. W. Very fine.		
24	47	29,8	S. Absent from		
25	45	30,3	W. S. W. home, taken		
26	49	30,4	S. S. W. Cloudy until noon, then fine. by my affift-		
27	48	30,3	W. Fine, but high wind. ant.		
28	46	30,2	s. W.		
Comparative Statement of Burials in the Parish of Alverstoke and Borough of Gosport from 1800 to 1803.					
Burial Places common to both,  At the Parish Church At the Town Chapel  At the Town Chapel  1800*. 1801*. 1802. 1803.  1800*. 1801*. 1802. 1803.  1800*. 1801*. 1802. 1803.					
Exclusive of Naval and Military?					
Hospitals. Total 42 33 23. 17					

<sup>\*</sup> N.B. As the population of the town, &c. increases in war, and diminishes in peace, it may be necessary to bear in mind that in 1800 and part of 1801, we were in a state of war.

MARCH.				
Day.	Ther.	Barom	Wind and Weather.	
I	51	30,1	N. W. Absent from home.	
2	48	30,		
3	37	29,9	N. W. Sometimes east, wind, and some showers of snow and sleet.	
4	37	29,9	N. E. Tolerably fine, but windy.	
5	40	30,	N. N. W. Very fine.	
	44	30,07	N. N. E. Fine.	
7	37	30,13	N. E. Windy and cloudy.	
8	40	30,1	N. E. Windy and cloudy, then finer and less wind, much rain at night.	
9	35	30,03	N.E. Cloudy.	
10	34	30,04	N. E. Cloudy.	
11	37	30,24	N. windy, sometimes fine, some little snow.	
12	35	30,46	N. Fine and clear.	
13	35	30,46	N. W. Very fine.	
14	47	30,37	W. Fine at times, mild, spots of clouds.	
15	45	29,7	W. Cloudy and rainy.	
16	43	29,93	N. Very fine.	
17	43	29,93	S. W. Cloudy.	
18	66	30,14	S. W. Inclined to rain.	
19	47	30,26	W. Small rain, fine afternoon.	
20	50	30,16	W. Small rain.	
21	53	30,24	E. Very fine.	
22	53	30,14	E. Very fine.	
23	55	30,16	E. Very fine. E. Cloudy, then fine.	
24	57	30,26	E. Cloudy.	
25	55	30,06	W. Afterward variable, very fine.	
27	57 60	30,00	S. E. Afterward variable, very fine.	
28	54	30,15	W. Variable, very fine.	
29		30,05	E. Variable, very fine.	
30	_	30,11	W. Variable, very fine.	
71	54		Wind variable, very fine, fog in the evening.	
Comparative Statement of Rurials in the Purith of Alverdala and Rosenth				

Comparative Statement of Burials in the Parish of Alverstoke and Borough of Gosport from 1800 to 1803.

Burials Places common to both,  At the Parish Church  At the Town Chapel	March {	18co*. 16 44	1801*. 13 32	1802. 12	15
Exclusive of Naval and Military Hospitals	Total	60	45	30	34

A!? / IJ						
Da	ay.	The:.i	Barom.	Wind and Weather.		
	I	53	30,07	E. Foggy in the morning, very fine.		
	2	53	29,73			
	3	53	29,6	Yariable from S. to W. then to eafterly, some rain in the night, then fine.		
	4	50	29,8	S. Some rain in the night, very fine, a little rain in the evening.		
	5	52	30,72			
1		56		S. E. Very fine.		
	7 8	54		E. Very fine, rain in the evening.		
	٥	53	29,72	S. E. Rainy, fine afterwards.		
	9	51	29,92	S. E. Rain in the morning, cloudy, fome rain in the afternoon and night.		
	OI	55	30,2	W. Cloudy morning, then fine.		
- )	II	59	30,44			
	12	55	30,5			
	13	57	30,5	E. Very fine.		
1	14	62	30,47	S. E. Very fine.		
	15	62		E. Very fine.		
	16	57	30,07	E. Wind changed to W. in the afternoon, very fine. W. Cloudy, high wind at night.		
	17	55	30,			
	18	48	30,	W. Rainy and windy at times, fome half in the morning.		
1	19	55	29,75			
	20	47	29,74	W. High wind and cloudy, with showers at times.		
	21	53	20,24	S. W. High wind and rain at times.		
	22	52	29.12	W. Fine morning, then cloudy, much wind.		
	23	51	29,63	W. Fine morning, then cloudy, much wind.  W. Squally at times, some hail, wind, and showers at times.		
	24	44	29,8	W. Fine morning, then showery, not much wind.		
	25	55	30,04			
	26	4.8	30,02	W. Very fine. (N. W. Fine, but cloudy N. E. afterward squalls of		
	27	47		wind and rain, until the evening, wind S.		
	28	1	1 3 -			
	29		J .	5 N. Cloudy, but no wind.		
	30	54	1 30,0	3 W. Very fine.		
	Comparative Statement of Burials in the Parish of Alverstoke and Borough of Gosport from 1800 to 1°03.					
	D	rial 121	aces cor	nmon to both, 1800*. 1801*. 1802. 1803.		
	o ul			h Church		
	At the Parish Church, April \					
Exclusive of Naval and Military?						
	Hospitals 3 Total 49 51 25 30					

Population of Parish and Town.					
	Population Act.	Desence Act.			
	March 801.	July 1803.			
Alverstoke Parish { Liberty part, - Gosport town, -	- 2980 -	- 2158			
	- 8315 -	- 7049			
Exclusive of those ferving in the Army, Navy, or Militia To	otal 11295 -	- 9207			

## ARTICLE LXXIII.

From Mr. ROWE; Portseat.

JULY 1803.

#### CASE I.

In the evening of March 18th, was defired to attend a female about 20 years of age. She complained of fudden chillings, which was succeeded by faintness, giddiness, throbbing pains in the head, flushes in the jaw, restlessness, weariness, and depression of spirits. Ordered her 1/2 dram sal nitri every hour and a half, dissolved in a cup of barley water, which she drank copiously of; her extremities were bathed in warm water. When I visited her in the morning of the 19th, found she had perspired very much through the night, the pain in the head was much relieved, the flushes in the face, and the weariness was gone off, and she was in every respect much better. She had now taken about ten drams of nitre, and continued to take

dram every 3d or 4th hour. 20th, Said she was now quite comfortante, but rather costive, discontinued the use of the nitre, and ordered her to take one ounce of vitriolated natron dissolved in a cup of warm water gruel, which operated very well. On the 21st all the symptoms were removed, leaving a debility which was removed by a nutritious diet, and moderate exercise. The master and mistress of this girl, who resided in the same house, complained of a sore throat, and flight fever at the fame period the girl was indisposed, which was removed by drinking freely of thin diluting drinks, a flender diet, and the partial use of the warm bath.

## CASE II.

Was that of a female aged 30, whose symptoms were nearly the same as case 1st, except that she complained of a cough, dyspnæa, and oppression at the breast, which was immediately removed on the application of a blister.

Several other cases I have met with which I treated in a similar manner. I have generally

rally found the good effects of sal nitri freely administered in thin diluting drinks. light diet, frequent bathing the extremities in warm water, and the application of blifters, where the dyspnæa and oppression at the breast has been great. I have invariably obferved the antiphlogistic plan, several males who were affected flightly, I have found a dose of vitriolated natron remove the disease; fome cases I met with which terminated on the 3d or 4th day, others not till the 8th or 9th day. I have never employed bleeding or emetics. I have generally found where one part of a family had the disease in any considerable degree, some of the other part of the family, complained of flight fever, fore throat, cough, or pains in the head. I have generally found males to be the greatest proportion that were affected. I have not met with any relapses, nor have I found any particular treatment required in the convalescent state; I have generally recommended a nutritious diet, with moderate exercise. I have generally found this disease attack persons from the age of 20 to 35, and from that to 46, or 46, or 47. It made its appearance in this neighbourhood, and within 10 or 12 miles of it, nearly at one and the same time. And to some of the inhabitants of this town, it has proved fatal.

## ARTICLE LXXIV.

# From Mr. WALLER, of Gosport.

- I. None excepting the Influenza, scarlatina, and opthalmia.
  - 2. About the beginning of March.
  - 3. During the month of March.
  - 4. About the latter end of May.
  - 5. The cough and peripneumonia.
- 6. Varied but little, except in degree in those of the same family.
  - 7. Not one fatal case.
- 9. No ages or classes more particularly affected, excepting such as prone to peripneumonic affections.
  - 10. More of females.
- 11. Know not that any particular plan of treatment subdued it more than another; neutral salines with antimonials chiefly employed.
- 12. Bleeding and emetics relieved for a feason, and I think rather tended to shorten the disease. Bleeding used in cases more strongly

strongly marked with inflammation; and emetics, if early in the disease, and marks of pyrexia.

- 13. Diluent or light diet.
- 14. Recommended to be much in bed.
- 15. Gradual relief of fymptoms, but tedious cough.
- 16. to 20. Relapses did occur, but were less severe.
- 21. Phthisical and peripneumonic affections blended with this disease were severe, and here one fatal case occurred in a patient upwards of 60 years, and impaired through hard service.
- 22. Think it was contagious from its general influence; several in a family, if not the whole, more or less affected. Yet many perfons I believe escaped it.
  - 24. In succession, but no certain data.
- 27. In my practice the country around us was infected later than the town.
- 31. If this means any affection of the animal tribe, have heard that many cows have died this spring.

July 2, 1803.

## ARTICLE LXXV.

From JOHN LIND, M.D. Haslar.

August 17, 1803.

In the military Hospital near Gosport, I learn from Dr. Bowles, whose observations on it Dr. Pearson has published, the Influenza was severe. In Haslar Hospital it combined with some cases of typhus, but was otherwise slight and difficultly traced.

## ARTICLE LXXVI.

From Reigate.

- r. The Influenza, or epidemical catarrh.
- 2. February 15th.
- Throughout March.
- 4. In May.
- 5. Fever and peripneumony.
- 6. Those who enjoyed the best health previous to the disease were the least affected by it.
  - 7. No.
  - 8. In this district, not one in 200.
- 9. The aged, the intemperate. Those who had weak lungs, or were by their employment exposed to the night air, or who lived hard, and were barely clothed.
- 10. I think females, probably from their being less exposed.
- 11. The fever, in most instances, being analogous to the typhus, I bled very few; but cleansed the primæ viæ of bilious sordes with

an emetic, and frequently administered the following cathartic pills 12 or 18 hours after. R. calomel. ppt. gr. iv. pulv. antimon. l. gr. ij. conf. arom. q. s. ut f. pill. I proceeded in the cure with small doses of antimonials, saline and camphorated medicines. Lac amygd. aq. ammon. acet. &c. Blisters had a good effect.

- 12. Answered in the foregoing.
- 13. The light, nutritious, and mucilaginous, taken in small quantities, at short intervals.
- 14. Moderately warm, and dry, airy situa-
- 15. Cessation of febrile symptoms. A sediment in the urine, return of appetite, and rest, free breathing, and expectoration.
- 16. Much depended on the patients taking care, particularly to avoid the night air.
- 17. I think more fevere, and the cough
  - 18. No.
- 19. Very weak and debilitated. Some complained of rheumatic affections; others of a continuance of the cough, but I know of no instance of phthis pulmonalis succeeding it.

- 20. Roborant and pectoral medicines, as g. myrrhæ, acid. vitriol. dil. or infus. rad. co-lombæ, &c.
  - 21. In many cases bilious complaints.
  - 22. Instances occurred of strong young people, as farmers' servants, &c. escaping it, though living in families wherein it prevailed.
- 23. In a workhouse in this neighbourhood (under my care) wherein there are 200 people employed in a blanket manufactory, wherein oil is used, no decided instance of the Influenza occurred.
  - 24. Generally at the same time, or at short intervals.
    - 25. The soil chiefly sandy.
- 26. Reigate, and the neighbourhood thereof, is screened from the north and east winds by lofty hills.
  - 27. It was discovered here, soon after its appearance in London.
  - 28. The days were rather warm for the feafon, but the nights unufually cold.
- 29. I cannot positively answer the first part of this question, but think it may be communicated.

I observed that in lonely situations where there was but little intercourse with other places, it was by no means so general as in towns, and villages.

- 30. Analogous, except in defluxions towards the head less general.
- 31. On inquiry amongst people who have large stocks of cattle, I do not hear that there was.

4

## ARTICLE LXXVII.

From W. VAUGHAN, M.D. Rochestes.

ton in the evening of the 25th of February, when it seized twenty-eight of Mr. Hulet's scholars. Out of this number sixteen were immediately sent home, and to the twelve who remained an emetic was administered. There were twelve others, whom the disease spared on the 25th, and who afterwards escaped it altogether.

Mr. and Mrs. Hulet cannot yet learn, that any adjacent place was previously attacked by this Influenza. And it is worthy of remark, that Mr. Stone's school, which is situated in the next street, had not a single scholar affected with it.

Mr. Hulet's school lies open to the north.

The twelve scholars, who had been vomited, and who drank plentifully during the night of weak wine-whey, were quite well

by the next morning; but the fixteen, who had been conveyed home, were all of them worse. And indeed, the least attentive obfervers agree in this, that the Influenza, if left to itself, came to its height on the second day.

Such are the more remarkable circumstances, as they seem to me, of Mr. Hulet's school, of which the complement is about forty scholars.

2. Of the Influenza, at Rochefter, I heard nothing till the 28th of February; and as foon as I found, that the patients complained of coldness and shuddering, I suspected a fever of some regular type, and endeavoured forthwith to learn it. This I did easily: an evening paroxysm in general began the disease, and was fucceeded by another at noon the next day: -two paroxysms in one period, and the fecond the feverer paroxysm; agreeably to the observation of Mr. and Mrs. Hulet, that the fixteen scholars who were sent home, and for whom nothing was done, were worse on the second day. In the second paroxysm, the disease seemed as if come to its acmé: and the fourth paroxysm, which corresponded with the second, ended with signs of criss.

From this time, the type of the fever feemed changed for that of a *simple* tertian; the even days remaining calm, and the odd days being disturbed by only one slight sit.

3. But how foon was the Influenza difcernible? Its approach was marked by symptoms of debility in all the functions, but in those more especially which some modern physiologists call external, or relative. (Physiologie par A. RICHERAND, Prolegom. LXXIV.) Pains of the head, and of the limbs, and of the chest, were constantly present in the beginning, and there was sometimes, among the precursory signs, a most distressing pain near the upper orisice of the stomach.

These, in different degrees, happening suddenly, and, as it were, without any evident cause, but accompanied with more or less of catarrh, and ushering in a horror about six o'clock in the evening, seemed to me to constitute the Influenza.

4. If the epidemics common to the season were more frequent, by consequence of the low temperature of the air, and the long continuance

tinuance of a sharp wind from the east and the north-east, they were so hybridized with the new one, so approximated to it, so assimilated with it, as, in most cases, not to admit of the remedies otherwise prescribed in them.

Pneumonia was, certainly, no part of this Influenza: in fome the pain of the cheft was not felt till the fecond paroxysm, and was even then less urgent than that of the head; in others the pain of the cheft was not constant; in none did it bear any proportion to the cough; and in all, perhaps, where some form of pneumonia was suspected, it was rather perfonated. Far be it from me to express a doubt, that this Influenza was ever complicated with a true peripneumony. I do but affert my own experience, limited indeed as it is,

- 5. During the prevalence of this epidemic, I recollect two only, who died: one of pneumonia under which she had laboured for several years in succession, another of pneumonia supervening on an habitual asthma.
- 6. It seems now to be a question of great moment, whether this Influenza was contagious?

gious? My opinion is, that it was not contagious: and this I infer, 1. not only from what is already stated respecting Mr. Hulet's school, but also from this, that Mr. Hulet's child did not infect its nurse: -2. from several in general falling ill at the same time, in the same house; or if falling ill one after another, doing so without the possibility of having caught it from those previously affected: -3. from its not sparing persons with issues, blisters, &c.-4. from reasoning by analogy: for, in the first place, although some escape every contagion, (1 in about 3 escape the contagion of the jail fever,) the proportion that did not suffer the Influenza was greater than it could have been, if contagion had actually been diffused or dissolved in the atmosphere; and, in the next place, if the fuddenness of the weakness seemed to countenance the supposition of a contagion, the suddenness of the action was inconsistent with what we know of other contagions: for they, all of them, produce "a disposition to take on the morbid action," which disposition is of a certain duration, according to the law of the specific poison.

7. No

- 7. No epizootic disease has prevailed here, or in the neighbourhood, during the last twelve months.
- 8. As I saw no reason to believe the Influenza to be a contagious disease, so I was not concerned in conjuring up anticontagious agents. Ablution with water and with vinegar, I ordered every where; and, as impure air, independent of contagion, debilitates, I took care not only that my patients should have a constant supply of fresh cool air, but also that the unnecessary abstraction of oxygenous gas from the air of their apartments, by any means whatsoever, should, as much as possible, be prevented.

However, accustomed to look upon every fever with a fear that it is contagious, I was upon the alert; and if the Influenza had spread any where, as from a centre, it would have been easy to stop its progress by separating the sick, and by a proper use of the oxymuriatic acid.

I endeavoured to keep the temperature of the air in fick rooms a little below, never above, 60° of Fahrenheit. 9. The Influenza, when unconnected with any other disease, ran its short course without danger. To lie abed and promote perspiration by the gentlest means, to keep the bowels soluble, and to avoid all causes of irritation, was all that prudence dictated to be done. Whey made with orange-juice was very grateful, and I ordered it frequently: others recommended pulvis antimonialis, which alone, and sometimes joined to calomel, had a very good effect.

regimen, yet even when pneumonia was prefent, in the case alluded to in No. 5. I did not venture to direct venesection: for I saw the blood that had been drawn from this very weak, very irritable woman; and its appearance certainly did not justify the drawing away of more. Pleurisies, which did not bear repeated venesection, were long since observed by the diligent commentator on Boerhaave (Comment in Aph. 1412). The learned De Haen and the judicious Mr. John Hunter were aware that venesection did not suit every inflammation. And the

time will probably come, and that foon too, when not only the nature of the inflammation, but also its stage, must be considered, before we order blood to be taken away.

with a view to cut it short, an emetic was, certainly, proper: but afterwards, and especially when the sever was "caput petens," or the lungs were much affected, it would, perhaps, have been improper. A paper on this subject by Dr. Thomson of Montrose is in the Edin. Med. Essays and Observations, Vol. IV.—How vomiting acts in cutting short any epidemic, whether by exterminating a poison before it has had time enough to produce its essects, or whether by destroying the incipient essect, i. e. the disposition, which is always prior to the action, I do not pretend to determine.

Where purges were indicated, I preferred magnesia vitriolata: and where the bowels were very inactive, or there was reason to suspect a coacervation of seces, I ordered calomel and an enema containing an ounce, more or less, of natron vitriolatum, both to be repeated è re nata.

- 12. With respect to diet, so inconsiderable was the duration of the disease, that as initia morborum famem desiderant, total abstinence was rather enjoined.
- 13. For a pain of the fide I prescribed a blister, which in general removed, or, at least, relieved the pain. But always, whenever the lungs were affected, I limited the use of liquids, as well to diminish the assume of blood to that organ, as to prevent the stimulus of distention.
- 14. If the head-ach was violent, a pediluvium, raising the mercury to 96°, and the repeated exhibition of magnesia vitriolata, with sinall doses of antimonium tartarisatum, afforded very speedy relief. Did the former accelerate the motion of the blood through the brain, while the latter diminished its quantity, by making a derivation to the kidneys and bladder?
- 15. The cough yielded to mucilages with nitre, to decoctum hordei compositum, to the steam of hot water, &c. squills, ammoniacum, ammonia, &c. seemed to me to be contra-indicated by the sever.

- 16. After the fever, the cough and watch-fulness were removed by pillula styracis, tinctura opii camphorata, a diet rather strengthening than heating, and, above all, a change of air; in a word, a change of place, when it could be undertaken without disturbing the patient's mind, proved the best restorative.
- 17. And, now, I will add, by way of supplement, a short account of the diseases, which I have observed to follow the Influenza, without endeavouring in the least to show their connection with it.

Catarrh and pneumonia have ever since occurred sporadically, as have likewise cynanche tonsillaris, cynanche pharyngea, and cynanche parotidea.

From about the beginning of June till the middle of July, an exanthematous fever prevailed, and was evidently contagious, although I have not been able to learn that it attacked any, except those whom the Influenza spared. Some called it a scarlet fever: but a scarlet fever it was not; for there was no florid redness of the skin, nor any desquamation of the cuticle.

Rochester, Sept. 5, 1803.

### ARTICLE LXXVIII.

From Mr. HODSON, Lewes.
SEPT. 8, 1803.

In answer to your letter respecting the Influenza, I have to inform you that it was very prevalent in this town and neighbourhood in March last. From the great resemblance which the disease in question had to a common catarrh, I cannot take upon me to fay exactly when it first made its appearance here or when it ceased; it was however at its utmost height about the middle of March, and I believe first appeared in the preceding month, and disappeared in April. We had heard of its prevailing in London, previous to its appearance here. The disease in general, as I have already faid, very much resembled a common cold; in those cases which were more fevere than ordinary, a great depression of strength generally took place more fuddenly than might have been expected

expected from the degree of fever, and even in milder cases, languor and debility so generally prevailed as to become a very striking feature in the disease. I met with two or three cases in which the pulse was remarkably flow. One was in a robust lad about 18, in whom the common symptoms of the difeafe were very clearly marked: I faw him soon after the commencement of the attack, and found his pulse only 40 in a minute; he however very soon got well, under simple treatment. With regard to the remedies, if much pain in the head prevailed at the commencement of the attack, which frequently happened to a great degree, an emetic was of great service. In ordinary cases, it was sufficient to keep the patient in bed for the first day or two under the influence of antimonials, and the aq. amm. acet. or common saline mixture, taking care, however, not to carry the diaphoretic effect to too great an extent. In those cases where the cough was very troublesome, I gave mucilaginous and demuscent medicines, with the occasional use of opiates, which I found very useful. I met Vol. VI. Qq with

with no case in which I judged it proper to bleed, but frequently had recourse to blisters on the chest, with good effect. When the cough continued troublesome, after the fever had pricty well subsided, as was frequently the case, the common squill pill of the dispensatory appeared to me to be of great service. With a view to remove the debility which so commonly prevailed during the convalescent state, I generally gave the infus. gentian. c. or quassia, or inf. rosæ, in preference to the bark. I met with no case which proved fatal, excepting two old men, who had neglected themselves in the beginning, and one of them had been, for many years past, extremely afflicted with asthma. Relapses did not appear to me to be common. Males and females, as far as I could judge, were equally subject to the disease; it occurred less frequently in young subjects, they were, however, not exempt from it, and I have met with it in infants. With regard to the Influenza being contagious, I am strongly inclined to think it is not. During the time the Influenza prevailed, the weather became much

warmer for a few days; the disease, however, did not appear to be checked or rendered milder in consequence, but on the contrary, vomiting during that time occurred more frequently. I do not learn that any epizootic disease prevailed particularly at that time.

#### ARTICLE LXXIX.

From LEONARD GILLESPIE, M.D. London.

June 20, 1803.

An epidemical catarrhal fever, or true Influenza, made its appearance at Fort Royal and St. Pierre's, Martinique, about the middle of July 1802, affecting a great number of persons and whole families: it was supposed by the inhabitants to be the forerunner of many other expected plagues, transported by their countrymen in a French corvette, arrived from France about this time; but this supposition seems altogether as fanciful as the name which was given it, that of "Le Chapeau quarré," (or the cocked hat,) from the hats worn by the French officers and soldiers, whom the people unjustly charged with having imported this disease.

This complaint appeared to have arrived at its greatest height about the middle of August, and

and had pretty well disappeared about the autumnal equinox.

The symptoms of this disease were generally discoloration, dejection of spirits, lassitude, head-ach, dry cough, hoarseness, oppression at the breast, and slight dyspnæa: in the afternoon fever, preceded by flight chills, generally came on, which remitted towards morning with diaphoresis; returning daily from three to seven days. In some patients, particularly in those of a phthisical habit, pleuritic stitches occurred; whilst in persons having weak bowels, particularly in children, and scorbutics, the catarrhal disease evidently attacked the intestines, exciting gripes, tenefinus, and loofe mucous stools.

It proved fatal exclusively, as far as my own experience goes, only to patients who had previously been affected with incipient or confirmed phthisis pulmonalis.

Women and children were more liable to be affected with this Influenza than adult males, yet of about five hundred prisoners of war, confined in ships, at least one half of the number were affected with the com-Q 93

plaint,

plaint, 70 or 80 of them labouring under it at the same time; a circumstance which sufficiently indicated that this disease was infectious.

The most simple mode of treatment was found to be the most fuccessful. Blood letting was rarely indicated, and in some cases was found hurtful. Emetics in full doses were not indicated; but antimonials in small and repeated doses, as the pulvis antimonialis, vinum antimonii or kermes mineral, were found serviceable, as expectorants and diaphoretics; guarding against the exciting of a diarrhœa by their use. Purgatives required great caution in their administration; when costiveness was present, emollient oily enemas, and oleum ricini, given in the form of a linctus (in which way it is often used with benefit in the West India Islands) were had recourse to with advantage. Blisters were fometimes used with good effects, as were large plasters of pix Burgundica applied to the breast or back.

Oily and mucilaginous pectorals, gentle anodynes, diaphoretic and pectoral beverages, and

and pediluvia, (or warm bath in the remission of fever,) were all occasionally had recourse to with good effects.

When the catarrhal defluxion affected the bowels, after a small dose of the vinum ipe-cacuanhæ, or of rhubarb, sollowed by an opiate, the columbo root with a mucilaginous diet, and small doses of ipecacuanha with opium were found serviceable.

As in the island of Martinique every febrile disease, particularly during the rainy season, is liable to assume the type of a remittent or intermittent sever, so in this epidemic; that occurrence frequently was observed; when the administration of the infusion of the cortex cinchonæ or augusturæ in cold water was given with good effects, taking care that expectoration was not checked too much by the medicines; for,

The natural termination of this disease was by a critical evacuation by diaphoresis and expectoration, and every medicine which counteracted these salutary excretions, appeared to do harm.

This Influenza was the precursor of the malignant yellow fever, or more properly Qq4 ardent

ardent fever, the causos of Hippocrates, which, commencing in the beginning of September, amongst the French seamen and soldiers lately arrived from France, committed the most frightful devastations amongst them; insomuch that out of 2500 veterans landed in September in Martinique, only 300 are said to have remained in life at the latter end of December.

Meteorological phænomena appeared to be connected with this epidemic, and that which fucceeded to it. From the beginning of May, the time at which the fun passes the zenith of Martinique, the weather became unufually rainy, squally and unsettled, with very severe and frequent thunder storms; whilst the wind hung very much in the fouth-east quarter; nor were these the only appearances denoting the superabundance of the electric fluid in the atmosphere, frequent and strong shocks of earthquakes, particularly at the periods of the full moons of the 15th of June, and of the same date in July, accompanied by an unusual height of the tides, demonstrated, in a very awful manner, this powerful agency.

# ARTICLE LXXX.

Further Account of the lithontriptic Power of the muriatic Acid, as observed by Mr. Peter Copland, in Lithiasis, and Icterus calculosus.—Extracted from a Paper, dated Swaysield, December 1800; read before the Society in March 1801.

The author, at a former period \*, had already favoured the Society with a paper, containing four cases on the subject of the present communication, which was published in the Society's Memoirs. He now informs us that he has continued to use, with success, the muriatic acid in calculous complaints, and relates seventeen illustrative cases, in addition to those just mentioned, these cases affording results which correspond entirely with those of his former experiments. It has not been

thought

<sup>\*</sup> See Memoirs of the Medical Society of London, Vol. V. p. 71.

thought necessary to publish them at full length, but the Society has desired that a summary account of them should be inserted in the present publication.

The dose of acid used by Mr. Copland is from 30 to 50 drops, three times a-day. The constant and uniform effect of this medicine, after a few doses, is stated to be the appearance of a considerable quantity of calculous sediment in the urine. This sediment is described as consisting, in almost every instance, of red sand, the nature of which does not appear to have been chemically examined by the author. In a few cases, however, there seems to have been also a discharge of light-coloured calculous matter; and in one instance, two-ash coloured concretions, weighing six grains, were found in the urine.

The general consequence of this discharge appeared to be a considerable relief of all the symptoms, and, in by far the greatest number of the cases related, a permanent cure was supposed to have been effected. In no instance, however, was the presence of a stone in the bladder ascertained by examination previous to the exhibition of the acid, but

from

from the quantity of calculous sediment obtained by the use of this medicine, amounting in one case to 110 grains, and in several to nearly as much, no doubt can be entertained as to the nature of the complaint. As a proof that this deposition was not afforded immediately from the urine, the author relates a case, supposed to be calculous, in which eleven ounces of the acid were taken, in doses of 60 drops, three times a-day, without producing the least sediment in the urine; and it was afterwards proved that the complaint had been mistaken, and that there had been no stone in the bladder.

After the author's great success with the acid in lithiasis, he was led to try its effects in Icterus calculosus, and relates three cases in which he has every reason to suppose that this medicine had the desired effect, but confesses that the event of so sew cases is not sufficient to enable him to draw any positive conclusion with regard to the last disease, although he considers it as well worth the attention of practitioners.

### ARTICLE LXXXI.

Sketch of a new Theory of the Cow-pock, with Remarks on contagious Disorders.

By JAMES SIMS, M.D. and L L.D., President of the Medical Society of London, V.P. of the Philanthropic and Horticultural Societies, F.A.S., and R. Ir. Ac., Hon. F. of the New York, Massach. Richm. and Avignon Med. Soc. &c.

At a time when so many doubts concerning the efficacy of vaccine inoculation, for the prevention of the small-pox, have been most industriously disseminated, it becomes the duty of every person, who thinks he can in any wise do away the seemingly increasing prejudices against that practice, to step forward in a matter so nearly concerning the whole human race.

Previous, however, to what I shall advance on this particular subject, I beg leave to say a few words declaratory of my general opinions concerning contagious disorders.

I have

I have often thought that in explaining the operations of our frame, we have made too little use of the doctrine of fermentation. There seems to be a regular progression through all nature, from the minutest process of inanimate matter to the highest one in the animal frame. The genera of fermentation in liquids, which were formerly confined to three, are now beginning to be enlarged by chemists, and may we not suppose that there exist many species of each? Might not an ingenious theorist shew, that vegetation is entirely a fermentative process, occasioned by folar heat, and that the different species of vegetables are owing to different species of it? Still carrying on the chain of reasoning, do we not fee in the animal, and particularly in the human frame, the progress of fermentation distinctly pointed out? A little of the matter of any of the contagious disorders is inserted into the body, and that disorder is produced and no other; and as in the fermentation of liquids, after the process has been gone through, it is impossible to excite the same kind of fermentation again in the fame materials, even by the addition of a ferment, ferment, so, after the infectious disease has subsided, the frame becomes incapable of it again. Is not this a plain reason for our not being liable to the small-pox, and other contagious diseases, constitutionally, a second time?

I have only mentioned this instance of fermentation in animals, but might I not go much farther, and say, that they, as well as vegetables, are intirely the products of fermentation occasioned by heat?

Whilst a student at College I maintained in a Medical Society, an opinion that all contagious eruptive diseases were communicated to mankind from other animals, among a particular species of which each particular disease might be said to be epizootic.

In 1764, when I began the practice of physic, my thoughts were greatly employed upon inoculation of the small-pox. The Suttonian method coming into vogue about that time, greatly arrested my attention, and as many points respecting it were kept secret, my mind was naturally much occupied with investigating the circumstances which gave it celebrity. Among other things which occurred to me, I imagined that a proper dilu-

tion

tion of the virus before infertion, might tend to render the disease milder. With this view I tried a number of sluids, mostly bland ones, but must acknowledge that I totally sailed in my intention, the only difference which I could perceive being that the certainty of infection was much lessened, whilst the disease was not obviously mitigated.

I mention this and the former opinions, not with any defign to take up the time of the Society with their investigation at present, but to lead the way to some farther ones, which I mean to throw out in the briefest manner, hoping in future to render them more than probable conjectures, when I shall endeavour to fill up the outline here sketched in a more extended work.

Although what I have stated as to fermentation, may shew why the system having been constitutionally affected by the small-pox, becomes incapable of receiving the same disorder a second time, yet it will not shew why the cow-pox should become an antidote to the small-pox; but if we suppose that the human frame is capable of giving infectious disorders to other animals, as well as receiving

them from them, a thing requiring little proof, we may easily solve the difficulty. It is only supposing, what I have no doubt of being true, that the cow-pock is nothing more than the small-pox transplanted from man to the cow, by means of the infected hands of those who milk them, and that in passing through the frame of that animal, it is diluted and made milder for its re-insertion into the human frame.

The proof of the cow-pock being only the small-pox transferred to the cow, may be obtained by inoculating that animal by friction on a fore teat, or by the lancet from the small-pox, in a human subject. We might, perhaps, fail in the first attempts, but this should not discourage us, as the final success would so nobly repay the trouble by extending our knowledge of nature in so beneficial a manner to the human race.

As I mean this only as a sketch of what I have to say on this subject, such only being adapted to your publication, I shall conclude with two remarks.

Had the cow-pock been at first supposed to arise from the small pox, instead of the grease in a horse's heel, all the doubts concerning its efficacy as a preventive of the small-

pox would either never have existed, or been done away long ere this: we should likewise have heard nothing of the wild suggestions of its being a bestial disease, nor the malignant senseles ones of its being scrophula. Would not the practitioner essentially serve both himself and mankind at large, who, by inoculating a cow with the small pox, should afterwards by reinoculation from her produce the mitigated disease called the cow-pock in the human frame? The most sceptical and timorous part of the public would have recourse to him, in preference to all other vaccinators.

A fecond remark is, that we fee by this a probable mode of mitigating the plague, yellow fever, and other fcourges of the human race; not by inoculating them from one man into another, but by making them pass, by insertion, through the bodies of various animals, until we discover the one that will render them sufficiently mild to the human race.

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#### ARTICLE LXXXII.

À la Societé de Médecine à Londres.

Sa Majesté le Roi de Prusse notre trés gracieux Souverain nous ayant ordonné du publier un conspectus concernant un prix qu'il destine à celui qui satisfera de la manière la plus complette aux questions ènoncées dans celui, que nous avons l'honneur de vous envoyer ci-joint, nous vous prions de vouloir bien lui procurer toute la publicité que vous pourrés, et nous vous assûrons d'avance de notre reconnoissance, et du plaisir que nous trouverons dans toute occasion de vous donner des preuves de la haute consideration, dont nous vous prions d'agréer les expressions.

Berlin le 22me May 1805. Le Collège superieur de Médicine et de Santé de sa Majesté le Roi de Prusse.

### CONSPECTUS

Quæstionis, a Collegio supremo medico Berolinensi, modum contagii sebris sic dictæ slavæ spectantis, propositæ.

Febrem flavam illis jure adnumerari morbis, quibus peculiare est, ab ægris ad sanos ope contagii transferri, experientia sat superque edocti fuimus.

> Patet inde, contagiosum virus huic morbo proprium existere, quod ex illo gignitur, et causam propagationis illius continet.

Quo vero modo contagium proseminetur nobis attamen hactenus non satis innotuit, sed ita latet, ut in dubio hæreamus; an ægrorum contactus solus contagionem sebris slavæ producat? vel an virus per atmospheram transferatur, et tali modo sanos contaminare valeat? vel tandem: an miasma febris slavæ, pestis miasmatis ad instar, corporibus omnigenis adhæreat, et illos ita insiciat, ut eorum

contrectatio ad producendum morbum istum contagiosum, sufficiat?

Ultimum hocce problema solvere et dubiam dissicultatem evidenter enodare, ideo maximi est momenti, quia cautelarum ad avertendam contagionem et compedum commercio imponendarum selectus, præcipue ab hac pendet explicatione.

Hactenus in enucleanda hac quæstione, medici attentionem ac solertiam non sufficienter adhibuisse videntur, et hinc potentissimus Borussorum rex consultum duxit, Collegio medico supremo Berolinensi injungere, ut viris arte peritis, quibus non desuit occasio epidemiam febris slavæ observandi ac e propinquo contemplandi, præmium offerret ac proponeret circa hanc adhuc dubiam materiam; quo ad perscrutandas et illustrandas quæstiones propositas adducerentur, ita ut illorum labore, repetitisque experimentis, ac factorum sedula investigatione, dubia hac de re in futurum prorsus evanescant.

Hoc jussu, supremum Collegium medicum Borussicum, artis peritos quibus hac de re observationes instituere et experimenta facere licuit, ut huic labori operam navent, rogat ac invitat. I.

Danturne facta minime dubia, et experimenta fide digna, quibus concludere liceat, miasma febris sic dictæ slavæ, corporibus exanimis et substantiis omnigenis ita inhærere posse, ut eo contagium hominibus communicari possit, qui contactui vel contrectationi eorum sese exponunt? Potestne ergo eo essici ut contagium febris istius hac via ad regiones longinquas transferatur, et exitiosum ibi producat morbum?

#### II.

Si hic propagationis ac contagii modus admittitur; quæritur: quænam sint vel facta vel experimenta quibus hæc opinio verosimilis aut certa reddatur? In casu vero opposito, opinio contraria rationibus ac factis itidem confirmanda erit.

#### III.

Licetne ut rem verosimilem, immo side dignam admittere, vel absque dubio consirmare, quod virus quo febris slava proseminatur productum ac progeneratio ipsius morbi sit? Inhæretne

Rr3

hoc miasma peculiariter uni vel alteri excreto animali et cuinam?

#### IV.

Patetne adeo natura et chemica mixtio hujus miasmatis, sic ut ex hac notione antidotum qualecunque, vel agens chemicum ad
subigendum vel extinguendum virus non
impar innotescat? Danturne alia prophylactica remedia contra hanc insectionem? Quænam sunt illa? suntne in eorum numero quædam, quorum virtus essicax manisesta ac comprobata sit? quonam utendum est methodo
ut illorum ope substantiæ contaminatæ et inquinatæ hoc miasmate plenarie et ita liberentur, ut contagionem porro inferre et morbi
exitiosi semina propagare non amplius valeant?

#### V.

Licetne temporis spatium statuere, ultrà quod, virus hocce virtutem suam contagiosam et proprietates suas nocivas, exserere nequeat? Daturne præsinitum tempus, quo elapso, substantiæ inquinatæ ad propagandum morbum non amplius idoneæ sunt et quo præterito

contagium, ut penitus extinctum haberi possit?

#### VI.

Licetne discrimen inter corpora ad suscipiendum virus apta stabilire et inter illa disferentiam admittere prout majorem vel minorem proclivitatem exserunt ad suscipiendum
aut ad conservandum aut in sinu suo sovendum
hoc miasma? Exstantne corpora facultate
miasma hocce suscipiendi omnino expertia,
dum alia huic exitiosæ imprægnationi sácillime subjiciuntur et quænam sunt utraque?

(Hîc tabula præcipuarum mercium subjungenda foret, in qua, respectu hujus quæstionis, hæ merces in diversas classes distribuendae essent.)

#### VII.

Quæritur porro: an morbus, qui sub nomine sebris slavæ in America septentrionali et ad littora maritima Hispaniæ nec non Ligurni grassatus est, unus idemque ubicunque suerit morbus? an vero pro regionum diversitate, discrimen qualecunque quo ad ortum, decursum et symptomata morbi, cladem quam

Rr4

sparsit.

sparsit et contagionis progressus, statuere liceat? ac quibusnam argumentis stabiliri hæc opinio potest?

#### VIII.

Estne denique febris slava morbus endemicus littoris? aut licuitne illum procul ab oris maritimis observare? videturne hæc distantia a mare in morbi decursu ejusque propagatione aliquid immutasse?

Potentissimi Borussorum regis jussu præmium

Ducentorum ducatorum aureorum illi pollicemur, qui quæstionibus propositis apprime respondebit, dubia illustrabit, ac experimenta sua factis indubitatis sulcire conatus erit.

Ad victorem propius accedenti Centum ducati aurei

præmio erunt.

Commentationes latino, gallico, vel germanico idiomate distincte conscriptæ et sequente inscriptione munitæ:

> (Au Collège supérieur de médecine et de santé de sa Majesté le Roi de Prusse, à Berlin)

ante calendas Januarii 1807 transmitti debent. Tardius venientes a certamine excludentur.

Auctores invitantur ut quisque nomen, munus et domicilium fuum schedula figillo obfignata includant, fimulque hanc schedulam extrinsecus inscriptione qualibet infigniant quæ eadem esse debet ac in fronte libelli. Collegium medicum supremum Borussicum de acceptis elaborationibus æquissimum faciet judicium, illique palmam decernet, quæ facta extra omnem dubitationis aleam posita simulque enodationes utiliores complectetur.

Propius accedenti secundum adjudicabitur præmium. Schedulæ fignatæ nomina aliorum competitorum continentes, illæsis sigillis, comburentur.

Berolini die 17. Aprilis anni 1805. Collegium supremum medicum et sanitatis Borufficum.

#### ARTICLE LXXXIII.

# Medical Society of London.

To encourage the sending valuable papers to this Society, the President proposes to give the following Medals at the Anniversary in March, to be adjudged by the Council.

First, A gold medal, for the best dissertation on any subject in Medicine, Surgery, Pharmacy, Midwifery, Anatomy, Chemistry, or Natural History, written by a Fellow of the Society.

Second, A gold medal, for the best disfertation on any of the before-mentioned subjects, written by any person, except a Fellow of the Society.

Third, filver medals, for the best dissertations on any of the before-mentioned subjects, whether written by fellows of the Society, or others, which may be thought by the Council to merit them.

The papers for these Medals must be delivered to the Medical Society, at their house in Bolt-Court, Fleet-Street, before the 1st day of January.

M. F. WAGSTAFFE, Register.

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