

was no Government Commission appointed to do the work, there was some probability that it might be done. The Whigs had not played fast and loose upon the question, as they did with the general drainage scheme, and the Protectionists had not had the opportunity of trying their hands at sham upon it. Our worthy friends set to the task in the good old Anglo-Saxon, self-helping fashion, and, under the clauses of the General Health Act, tried if they themselves could not provide for the common means of safety.

"The result of their efforts is well worth noting—its comparison with the state of the districts in which no efforts have been made will effectually fix responsibility upon the indifferent and upon the quacks. A cost of £7,500 has been incurred in a district numbering 1,500 houses. The average is just £5 per house. What has been got for the outlay? Eight miles and three-tenths of sewer mains and sub-mains, 10 miles of water-mains and branches, which last are connected with 170 hydrants, that is, self-acting tubes, which, by the mere high pressure of the water, conduct it in any case of fire over the highest houses in the district, so that it is thrown without the need of any usual fire-engine, and may be used to put out a conflagration before such casual assistance could arrive. Two steam-engines and pumps, and an upper and lower reservoir, are included in the cost. Thus the inhabitants, for their £5 per house, have a constant water supply, not kept in cisterns, but, by high pressure, constantly at hand, and perfectly fresh and cool, laid to the very tops of their houses if they choose it, and entailing an expense of about twopence per house each week. They have the readiest and most effectual remedy for accidents by fire, and they have a complete drainage on the most modern system, not indeed so costly as the old brick sewers, but infinitely more effectual, as the 'back drainage' would drive all refuse through the pipes not only before it would have time to taint the air, but before it could putrify. The entire cost, if I understand the report, including the repayment of the original outlay for all these purposes, would not exceed 3d. a week for a £10 house containing a water-closet. Indeed, the report boasts that the expense of the water supply will fall below that of the maintenance and repair of cisterns and their appendages to those who are already possessed of them. It was not to be wondered at that the inhabitants of Tottenham, seeing what has been done for them, are gladly and almost unanimously availing themselves of the advantages so provided. To those communities who may have decision and enlightenment enough to follow this example, it is fit to offer the further encouragement that the cost of putting the Health of Towns Act in operation has been but £66. 14s. 6d.; whereas, as the report too truly observes, a local Act might, at the usual average, have entailed an expense of £2,000."

THE Council of the Bath and Bristol Branch, in accordance with an unanimous resolution, have convened a special general meeting of the Members to be held at the Royal Western Hotel, Bristol, on Tuesday evening, the 26th instant, to consider if any and what steps should

be taken in consequence of the verdict given on the trial—*BOURN v. Cox*. And also to consider the propriety of publishing such a letter on medical subjects, in a public newspaper, as was recently done by Mr. JOHN BARRETT, in the case *BOURN v. Cox*.

## Medical Intelligence.

(From our own Correspondent.)

LONDON, OCT. 25, 1852.

THE medical societies in the metropolis are in the course of resuming their usual avocations. The Harveian is almost in the nature of a private society; but the Medical Society of London, the proceedings of which are generally announced in the medical journals, requires some notice. The first meeting for the present session was held on Saturday, the 9th instant, Dr. Lankester, Vice-President, in the chair, the President, Mr. Bishop, being unable to attend in consequence of an attack of rheumatism, from which, however, he was said to be recovering. The attendance of members was as usual. A goodly number of medical men were present, but the room was not uncomfortably crowded. During the recess some improvements have been effected in the meeting-room; the ventilation is better managed than before; the "draughts from Heaven or blasts from Hell" are now not felt so as to endanger health as was previously the case, and in every respect, indeed, the meeting-room shows that some efficient hand has been at work. Over the seat of the President is a fine bust of Hippocrates. The society, it was stated, was flourishing; indeed, it was never in a better condition: its financial difficulties had passed away, and it was fully anticipated that the amalgamation with the Westminster Medical would prove in every way an excellent measure for its ultimate benefit. Many papers from authors of repute belonging to the society had been promised for the commencing session, and the shelves in the library, which, although filled with an ample supply of ancient medical works, had yet room for more, especially if recent ones, had had numerous additions made to their contents during the recess.

The first communication made was by Dr. Hawkesley, and had reference to an improvement in the air-mattress, or bed, for invalids suffering from diseases of the urinary organs which prevented their retaining the usual excretion. It consisted simply in the perforation of the mattress by a tube made of vulcanised India-rubber, which on its upper surface presented an infundibuliform, or funnel-shaped cavity, into which the fluid ran as it passed away, and thus tended to prevent irritation of the skin, and the subsequent bed-sores. The patient, it was said, might be moved once or twice a day, and the surface of the mattress sponged and dried. *Par parenthèse*, Dr. Hawkesley remarked that he had found oxide of zinc and water the best application when the skin is irritated by the urinary discharges. Mr. Box showed the improved air-mattress duly inflated.

Dr. Lankester next exhibited a small box or case,

containing several acupuncture needles, ranged in a circle, which on being applied to the skin and pressure exerted on the other end of it, caused the needles to penetrate to a greater or less depth, as might be desired. In this respect it might be compared to the scarificator in cupping, except that it was worked by pressure and not by a spring. Dr. Lankester said it was used on the Continent in cases of rheumatism, &c., croton-oil being afterwards rubbed in on the wounded parts as a rubefacient, but in that respect he could not say it was better than the ordinary croton-oil ointment, or liniment. He had met with it in France, and finding that those medical men in this country to whom he had shown it had not seen or heard of it before, he had thought it might be useful to exhibit it to the society.

Mr. Richardson, of Putney, next brought forward a specimen of enlarged spleen, taken from a patient of Dr. Smith's, at Richmond. The deceased had been ill several weeks, and a tumour in the abdomen had been discovered, but its nature not recognised. The spleen weighed  $3\frac{1}{2}$  lbs. The left kidney, on which that organ rested, was partly atrophied, the right being of the natural size, which he (Mr. Richardson) accounted for by saying that the compensating increase in size, &c., of one organ, when its fellow is atrophied, rarely if ever occurs after the 30th year. The heart was also very much atrophied, the left cavity of the pleura full of fluid, and the lung much compressed. Death occurred by asthenia.

Dr. Rogers showed a specimen of calcareous deposit in the aorta, and on its semilunar valves, with extensive enlargement and softening of the heart, and commencing fatty degeneration of its walls. As he was only called to see the deceased, aged 37, when in *articulo mortis*, he could not institute a careful stethoscopic examination, but there were great regurgitation and obstruction at the site of the semilunar valves.

This was followed by a short but interesting paper by Dr. Cogswell, who detailed sundry experiments made by himself and others, on frogs, rabbits, &c., with hydrocyanic acid, the result leading him to conclude that that powerful agent exercised a great influence on the larynx and trachea.

The evening concluded by reading a highly interesting and philosophical paper written by the president, Mr. Bishop, "On some of the principal attempts to reduce the Functions of the Human Body to an exact Science," in the course of which the author sought to bring the physiological and some of the pathological phenomena of the human apparatus to the certainty of mathematical formulæ. It elicited some discussion, to which the absence of the writer was a great drawback.

The Pathological Society, one of the most recent, and at the same time one of the most valuable medical societies in the metropolis, commences its session on the 19th instant. Meanwhile the council have published their sixth annual report, a volume replete with most important information on every subdivision of pathology, illustrated by some excellent reports on sundry of the cases, and by useful and careful engravings. This Society, beyond a doubt, is destined to take a high place among the scientific bodies of the United Kingdom.

The Royal Medical and Chirurgical Society, though last, certainly not the least of our medical institutes, delays its commencement until the second Tuesday in next month, when we may expect to be able to enrich our reports with notices of the valuable papers to be brought forward for discussion at its meetings.

At the succeeding meeting of the Medical Society of London, Mr. Bishop, the President, was still unable to take the chair. Although recovering from the attack of acute rheumatism under which he has now been suffering for some time, he has not yet convalesced sufficiently to encounter the risk of exposure to the influences of night air at this season of the year. His place was worthily filled by Dr. Edwin Lankester, one of the Vice-Presidents of the Society.

A singular and interesting case of emphysema was described by Dr. Burke Ryan. His patient was an infant, suffering from scarlet fever; from the commencement of the attack it had suffered from great depression and dyspnoea, and the occurrence of the eruption was simultaneous with an emphysematous appearance, which commenced about the jaws, and extended over the whole of the upper part of the back, and thence to the integument covering the chest. The case soon ended fatally. Although Dr. Ryan was not allowed to institute a *post-mortem* examination of the body, he felt satisfied that the emphysema did not originate in the lungs, but was caused by the spontaneous decomposition of the tissues, induced by the poison of scarlatina. As an illustration of this opinion he quoted several similar cases connected with zymotic disease, but acknowledged that he did not know of any in which the scarlatina poison had previously produced such a result. He purposes publishing the details of the case in full in one of the medical journals, and the profession will be enabled to see his reasons for that opinion given at greater length, and will be enabled to ascertain their value.

A singular exhibition was made subsequently, by Mr. Weeden Cooke, one of the surgeons connected with that newly-started aspirant for public and professional favour—the Cancer Hospital. He showed under the microscope sundry insects, of the shape of bugs, but rather more ovoid, and others eel-like in figure, which he had found in the matter secreted by a cancerous ulcer on the tongue. He said that he had examined many such sores in various parts, but had not, as yet, found these insects anywhere else, but always on the ulcers of the tongue.

The parts concerned in the operation for excision of the elbow-joint, some time subsequent to the operation, were next exhibited by Mr. Henry Smith. The most interesting feature of the case consisted in the very rapid occurrence of necrosis of the humerus, caused by a fall, fracturing that bone, when the patient, a very strumous boy, was very nearly convalescent after the operation. The shaft of the bone, from the fracture downwards, was necrosed; in the course of a week Mr. Smith felt himself called upon, consequently, to amputate at the shoulder-joint. So rapidly did the death of the bone occur, that Dr. Camps could not credit its dependence on the accident, but was inclined to refer it to pre-existing disease of the bone, connected with the state of

the elbow-joint, for which excision had been practised. This opinion was controverted by Messrs. Gay, E. Canton, and H. Smith, all of whom held the opposite view. The two former detailed cases in which the progress of necrosis was equally rapid; and Mr. Gay stated, that within the last twelve months he had seen more cases of necrosis than he had done during his previous professional career. So prone indeed was the osseous structure to take on that form of diseased action, that the slightest injury would induce it. A blow, by no means severe, on the tibia, had induced necrosis of that bone, extending to the knee-joint, and necessitating amputation in the lower-third of the thigh, and singularly enough the shaft of the femur subsequently became necrosed. This, Mr. Gay stated, had occurred in two instances in his practice during the last twelvemonths, so that he was now led to regard every injury to the bone, however slight it might appear to be at first, as likely to involve most serious consequences. Mr. Weeden Cooke regarded this tendency to necrosis as in some way connected with the tendency to asthenic disease, which has now been noticed for some years, and added, that he had seen it ensue in several cases of the furuncular and carbuncular endemic now prevailing.

An excellent and most valuable paper by Dr. Risdon Bennett, "On Cases of Empyema, discharged through the Bronchi, and on the Character of the Purulent Pleuro-Pneumonia," closed the *sederunt*. After detailing at some length several interesting cases of empyema, caused by the pleuro-pneumonia, in two of which the matter was discharged through the bronchi, and the patients recovered, Dr. Bennett proceeded to show the difference between the epidemic pleuro-pneumonia and the ordinary sthenic form of that disease. It usually commences either by pleurisy or catarrh. The pain is very severe, and effusion occurs rapidly, and to a considerable extent, soon becoming purulent: cough not troublesome; the sputa copious, and more or less tenacious and glairy, sometimes streaked with blood, at others resembling prune juice, or of a dirty-green yellow colour; dyspnoea not urgent, nor the respirations much increased in frequency; skin moist and clammy; tongue covered with a creamy fur; pulse rapid, soft and feeble. The physical signs indicate the rapid spread of inflammation over a great extent of surface, but usually confined to one side; although many cases of double pleuro-pneumonia fell under Dr. Bennett's notice. The principal character of the inflammation, besides its asthenic signs, was the tendency, not to solidification or hepatization of the lung, which rarely occurred, and never to any extent, but its rapidly assuming the suppurative form, and its liability to run into gangrene. Dr. Bennett regarded it as a variety of erysipelatos inflammation; and the treatment consequently was stimulant, and not antiphlogistic. Local bleeding was serviceable at the very commencement of the attack; but was practised only to a limited extent. Five-grain doses of compound pulverised ipecacuhana, with a grain of calomel or grey powder, given every six hours, were found of use; but counteraction by means of blisters, with ammonia, combined with its acetate, and serpentaria or senega, constituted, in his opinion, the best plan to be adopted. Beef-tea and wine were also necessary. The disease

was found to be very fatal, and with great rapidity. In some cases, so rapid and great was the prostration, that stimulants were requisite *ab initio*. Dr. Bennett's views were generally supported by those who followed him, except that Dr. Theophilus Thompson considered it injudicious to give opium, as it lessened the expectoration and increased the dyspnoea, tightening also the cough. Both Dr. Thompson and Dr. R. Bennett alluded to the operation for paracentesis thoracis, which they considered was indicated, not by the increasing dyspnoea, but by the inability of nature to force a passage for the secreted pus, either by bronchi or externally. If there be evidence to show that by either way the matter is likely to be discharged, then the operation is not to be practised.

The first meeting of the Pathological Society of London was held on the 19th instant, Mr. Cæsar Hawkins presiding. The attendance was exceedingly good; in fact the rooms were crowded. There can be no doubt but that this Society will, ere long, embody all the talent in the metropolitan sections of the profession. After a short congratulatory address, delivered by the President, some interesting specimens of morbid anatomy were exhibited, and commented on by the members. Dr. Peacock commenced by an attempt to demonstrate the muscular character of the valve which closes the foramen ovale. He said that as he had entertained doubts as to the accuracy of the explanation generally given of the closure of the foramen, he had made a series of dissections, and had distinctly ascertained the muscular character of the parts. This, however, was not a discovery, nor did he claim it as such, as Senac had also distinctly demonstrated the fact. The muscular fibres could be seen on examination, he added, passing down from the coruna, and their action was to draw up the valve. These fibres are almost, if not entirely, derived from the left auricle, not from the right. This muscular character of the valve may be seen very clearly in the hearts of some fishes, more especially in that of the young turtle. Dr. Peacock concluded by showing in what way this condition of the valve may be applied, to explain certain malformations and changes in the pathology of the heart. Haller denied the existence of these muscular fibres: he admitted having seen them, but asserted they were not constant in their presence.

An interesting case of hernia of the bladder into the right scrotum was next exhibited by Mr. Pilcher for Mr. Lane. There was also a large intestinal rupture on the left side. The prostate was very large, and the bladder much congested and diseased, the hernia having existed on the right side for ten years, and yet no difficulty had been experienced in evacuating its contents until about a fortnight previously, when the use of a catheter was required. The man died in a few days afterwards. Mr. Baker, who attended the poor fellow in the first instance, mentioned, as singular facts, that he had been able to retain the urine for four or five days on one occasion, and that when it was drawn off it filled a large washhand basin. On a subsequent occasion a still larger quantity was drawn off by means of the catheter.

In the volume of "Transactions" recently published

by the Society, is contained the records of a case of fatty degeneration of the uterus subsequent to parturition, by Mr. Rainey, of St. Thomas's Hospital. The case was brought before the profession to show the manner in which absorption of the uterus, enlarged during pregnancy, takes place, an opinion being now afloat that the tissues of the womb undergo fatty degeneration, and are subsequently entirely absorbed; or that, in fact, there is a new uterus in every pregnancy. Although this view certainly appears to be a most singular and strange one, it is not unsupported by facts. In addition to the case above alluded to, another was brought forward on the 19th instant, by Dr. Bristowe and Mr. Rainey, more strongly illustrative of the theory, inasmuch as the woman having died a week later, as regards parturition, than the other, the fatty degeneration was much further advanced. Mr. Rainey's object in showing the specimen was stated to be to prove that this peculiar degeneration was not owing to inflammatory action, but was a natural process occurring after parturition. The patient died from metrorrhæmia, with secondary abscesses in the pericardium, heart, lungs, &c. These views, respecting the changes in the uterine structures after delivery, were first promulgated by Dr. Kilian, and have since been strongly advocated by Mr. Rainey and others.

Dr. Bristowe subsequently showed a specimen of cancer of the liver and right lung, with, as he fancied, tubercle freely deposited in the left lung. As, however, there was considerable doubt whether the matter in that organ was really tubercle, and as Mr. Rainey, after examining it under the microscope, had given a decided opinion against its tuberculous character, it was referred to Dr. Jenner and Dr. Brinton, to examine and report upon it at the next meeting. The coexistence of cancer and tubercle in the same person has hitherto been considered as almost fabulous.

A case of extensive fatty degeneration of the heart, occurring in a female about 30 years of age, was brought forward by Dr. Sibson, under whose care she was admitted, in a dying state, into St. Mary's Hospital. No history of the case could be obtained from her, and as the case was quite recent, Dr. Sibson had not had time to collect any particulars from her friends. The mitral and aortic valves were almost completely converted into fat; but the walls of the ventricles, although they had undergone some change, were not destroyed by degeneration. The heart weighed fifteen ounces. The tubules of the kidneys were partly loaded with fat, and some of the malpighian tubes were congested.

Dr. Handfield Jones exhibited a diseased and degenerated placenta, the foetus being born dead, the evidences of its vitality in the womb having ceased about the fifth month. The foetal surface of the placenta was normal, but the maternal appeared as if it were atrophied; it seemed to be a thin layer spread over the foetal portion, with trabicular lumps, as it were, in different parts. In the maternal fibrous homogeneous membrane, there were traces of fibres, of cell-growths, and nuclei; none of blood-vessels, except, indeed, a series of outlines indicative of the course of the veins, all of which were obliterated. The cell-growth described by Goodsir was completely atrophied, many of the villi were opaque, from the presence of calcareous and oily

substances; some, however, were simply atrophied. What was the nature of this change? Rokitsanski referred it to inflammation, but he (Dr. H. Jones) held a different opinion, for there was nothing to show the presence of inflammation. He regarded it as owing to an unhealthy condition of the blood, and as allied to cirrhosis of the liver, and such like diseases.

ON

## THE OCCURRENCE OF BERBERINE IN THE COLUMBA WOOD OF CEYLON, THE MENISPERMUM [COSCINIUM] FENESTRATUM OF BOTANISTS.

By JAMES D. PERRINS, Esq.

THE following investigation was made in the chemical laboratory of St. Bartholomew's Hospital, under the immediate supervision of Dr. John Stenhouse. Dr. Stenhouse having had for some time past a quantity of wood of the *Menispermum fenestratum* in his possession, suggested to me this investigation. I am anxious, therefore, to acknowledge my obligation to him, not only for the material, but also for several valuable suggestions in the course of the inquiry.

Hitherto the chief source of the alkaloid berberine, has been the root of the barberry, *Berberis vulgaris*. Bödeker, however, about four years ago, ascertained its existence in the columba root of pharmacy, the *Cocculus palmatus*, where it occurs in small quantity associated with columbine. The following remark is made in the *Chemical Gazette* for 1849, vol. vii., p. 150:—"The occurrence of berberine in *Berberis* and *Cocculus* is remarkable in a physiological point of view. Bartling places both of these families, the Menispermæ and Berberidæ, in the class of the Cocculinæ, which is in accordance with the fact of both containing the same principle." As berberine has now also been found in another of the Menispermæ, the accuracy of Bartling's view seems to be greatly confirmed.

The following was the process adopted for the extraction of berberine from the *Menispermum fenestratum*. A quantity of the wood, which had a bright yellow colour, resembling that of quercitron, was rasped, and then treated with successive portions of boiling water till it had become nearly tasteless. The aqueous decoction acquired a deep yellow colour and an intensely bitter taste. It was next evaporated carefully to the consistence of an extract, then introduced into a flask and boiled with ten or twelve times its bulk of rectified spirit of wine, filtered while hot, and the residue boiled with a further quantity of spirits, which dissolved the berberine, and also a quantity of resinous matter by which it was accompanied. The alcoholic solution was then introduced into a retort, and the spirit carefully distilled off, until the residue on agitation appeared to have nearly the consistence of oil of vitriol. It was then set aside in an open vessel, and in the course of

twenty-four hours the liquid became filled with a mass of impure crystals.

After draining off the mother liquor, these crystals were washed with a small quantity of cold spirit, redissolved in boiling alcohol, and set aside to crystallize. Their complete purification was attempted by repeated crystallizations. It was found, however, that a small quantity of resinous matter adhered obstinately to the crystals, causing them to remain of a brownish-yellow colour. This brownish tint was ultimately entirely removed by solution in spirit of wine and digestion with a little purified animal charcoal, the pure berberine crystallizing from the solution in beautiful bright yellow needles. The crystals were found to contain nitrogen, and their behaviour with various reagents corresponded exactly with those of berberine.

As these crystals were very soluble in boiling water, a quantity of them was dissolved in that menstruum; and on the addition of the requisite amount of hydrochloric acid, a crystalline precipitate was immediately obtained in the form of long, slender, golden-coloured needles, of a fine silky lustre.

This salt was dried in a water-bath at 212° Fah., and subjected to analysis with the following results:—

6·25 grs., ignited with chromate of lead, gave 14·398 grs. of carbonic acid and 3·2 grs. of water.

The nitrogen was determined by Willis's method. 8·18 grs. of salt gave 4·94 grs. of the double chloride of platinum and ammonium.

The chlorine was determined as chloride of silver. 3·59 grs. gave 13·5 grs. of chloride of silver.

The *Menispermum fenestratum*, is, according to Ainslie, a large tree, which is very common in Ceylon, and an infusion of which has long been employed by the Cinghalese as a valuable tonic bitter.

Gray, in his *Supplement* to the Pharmacopœia, informs us that this tree is known to the Cinghalese by the names of Woniwol and Bangwellzetta.

Berberine may easily be obtained in very considerable quantity from columba-wood, the whole of which it pervades, and of which it is the colouring principle; and if, as I suspect, the resinous matter accompanying it consists chiefly of altered berberine, improved methods of extraction, such for instance as the employment of a vacuum pan apparatus, would in all probability still further augment the amount of product.

I am informed that berberine is employed as a remedial agent on the Continent, but its scarcity seems hitherto to have prevented its introduction into the medical practice of this country. As a good source for it has now been pointed out, it may be expected that berberine will take its place with the other alkaloids in our materia medica. To prevent misconception from the similarity of names, it may perhaps be well to remark, that berberine and bebeerine are very different substances,—the latter being the active principle of the bark of the bebeer tree of Guaiana, and as yet has not been obtained in a crystalline form.—*Philosophical Magazine*, August.

St. Bartholomew's Hospital, July 20, 1852.

## ROYAL COLLEGE OF SURGEONS.

The following gentlemen were admitted members on the 15th instant:—Robert Austen Allen, Stewarts Town, Tyrone; Carl August Ludwig Bauer, London; Thomas Henry Cheate, Burford, Oxon; Robert William Cockerill, Greenwich; Charles Davenport, Welford, Gloucestershire; Stephen Donegan, Cork; James Crowder Eastcott, St. Pancras; Amos Ingham, Hebdenbridge, Yorkshire; Edward A. Middleship, Hon. East India Company's Service, Bengal; Matthew Morris, Haverfordwest, Pembrokeshire; James Nicholls, Trekenning, Cornwall; James Winter, Dublin.

## SOCIETY OF APOTHECARIES.

Gentlemen admitted members on Thursday, the 7th instant:—Henry Vandyke Carter, Scarborough, Yorkshire; Robert Newcombe Day, Harlow, Essex; Thos. Peete, London; Robert Whitby, Maunham St. Peter, Norfolk.

Gentlemen admitted members on Thursday, the 14th instant:—Charles Blatherwick, Titchfield, Hants; Angus Macmillan, Hull; Albert Massey, Camberwell; James Nicholls Trekenning, Cornwall.

## PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

### NOTICE TO MEMBERS.

The Central Council of the Association beg to call the attention of those members whose subscriptions are in arrear to the following resolutions passed at the Anniversary Meeting, held at HULL, on the 7th and 8th of August, 1850:—

“But if any Member's subscription remain unpaid twelve months after it shall become due, the *Medical and Surgical Journal*, and other publications of the Society, shall be withheld from such Member till his arrears be paid; and when any Member has been in arrears of subscription for the space of *three years*, application shall be made for the same by the General Secretary, and if the arrears be not paid in *three months*, the name of that Member shall be omitted from the list of Subscribers; but this omission shall not be deemed, either in honour or equity, as releasing any Gentleman from the subscriptions owing during his Membership.”

Those gentlemen who have not yet paid their subscriptions for the CURRENT YEAR, or who are in ARREARS, are requested to forward the amount due either to the Secretary of the district in which they reside, or to the Treasurer or Secretary of the Association at Worcester.

All post-office orders should be sent either to the Treasurer or Secretary, who alone have the power of giving receipts.

J. P. SHEPPARD.

Worcester, October 23, 1852.

Secretary.

## TO CORRESPONDENTS.

Communications have been received from Dr. Black, Mr. Higginbottom, Dr. Meret, Mr. Colthurst, Dr. Turnbull, Mr. Norris, Dr. Duncan.