

Association Intelligence.

NEW MEMBERS OF THE ASSOCIATION.

THE following names of new members were accidentally omitted from the list published on August 23rd.

Coveney, J. H., Esq., Prestwich.
Harvey, R. S., Esq., Lincoln.
Hewson, J., Esq., Lincoln.
Roberts, D. L., M.D., Manchester.
Samelson, A., M.D., Manchester.

PHILIP H. WILLIAMS, M.D., *General Secretary*.
Worcester, August 30th, 1862.

EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Ship Hotel, Faversham, on Thursday, the 11th of September, at 3 P.M.

Dinner will be ordered for 5 P.M.

THOMAS BOYCOTT, M.D., *Secretary*,
Canterbury, August 27th, 1862.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 24TH, 1862.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

REPORT UPON SYPHILIS, WITH REFERENCE TO THE MORE MIXED AND UNUSUAL FORMS OF THE PRIMARY SYMPTOMS. BY J. A. MARSTON, M.D., ASSISTANT-SURGEON, ROYAL ARTILLERY.

[Communicated by HENRY LEE, Esq.]

THE writer commenced his paper with a *résumé* of the modern doctrines usually held and taught. When model cases presented themselves, the diagnosis and prognosis were easy. It was the frequent occurrence of mixed cases—sores of various kinds and forms—that offered such great difficulty. Putting aside all question as to the objective symptoms by which an infecting can be differentiated from a non-infecting sore, there could be no doubt that these two varieties or species existed, as proved by daily observation, the results of confrontation, and the very important results obtained from Danielsen's inoculation of patients suffering from Norwegian leprosy with chancreous virus, one case only having been followed by constitutional symptoms, in which the virus had been obtained from an indurated sore.

The author, taking typical examples, gave the leading pathological characteristics of the two forms of sore as follows:—

What peculiarly marked the soft chancre was a solution of continuity of the soft parts by an ulceration and suppuration, having in its origin and progress an intimate connection with an active inflammatory process.

In the infecting form a slower process of abnormal nutrition in the part affected was observed, by which was induced a localised product, partaking of the nature of a morbid growth, without any necessary relation to inflammatory phenomena. For these reasons it was relatively chronic in its source, and capable of removal by a gradual process of absorption, without the production of pus, or any loss of substance. In the first, the virus (as holds in the case of a mechanical substance) might pass by the lymphatics to be arrested at the nearest gland, there inducing a repetition of the inflammatory process it had originally caused; while in the second, the sphere of in-

fluence exerted by the virus was much wider, affecting the vascular as well as the lymphatic absorbents, by which it happened that the blood elements, passing through both chancre and gland tissue, became affected.

Dr. MARSTON then spoke of the limited character of the ulceration or erosion, compared with the deeper and wider seat of the induration. From an infecting sore so characterised, some epidemic or epithelial scales would necessarily be mixed with the scanty excretion obtained from its surface, in addition to lymph cells, which would approach the characters of pus, as the infecting possessed the characters of the non-infecting sore—viz., depth of erosion, activity of progress, and vascularity. The line of demarcation between the two sores, however, the author thought, could not be easily drawn from the character of the discharge alone.

Mr. Henry Lee's important observation in 1856, as to the non auto-inoculability of the indurated sore, was next remarked upon. Alluding to the views promulgated by De Méric, Diday, De Clerc, Rollet, and particularly the exhaustive series of observations made by Bassereau upon a duality of the virus, as the cause of the differences observed in the infecting and non-infecting sores, he cited in illustration the case of a battery stationed at Christchurch. Amongst the many instances of venereal disease, only one ulcer proved to be of the infecting type, and in it the virus was obtained from a London source.

The writer then alluded to the modifications in the character of venereal sores effected by the physiological properties of tissue, the effects of irritation and indolence, giving some cases in illustration of his observations. Having premised thus much as essential to the right appreciation of what followed, the author treated of—

- I. The varieties of infecting sore.
- II. The results obtained by auto-inoculation.
- III. The occurrence of syphilitic infection after suppurating bubo.
- IV. The occurrence of constitutional symptoms following urethral discharge clinically identical with gonorrhœa.
- V. The bubon d'emblée.
- VI. The periods of incubation preceding the appearance of the two kinds of venereal sores; and the absence of any guarantee against constitutional infection by any abortive treatment applied to the primary syphilitic lesion.

I. Excluding the Hunterian chancre, and ulcers possessing specific induration, the author made some observations upon superficial erosions, involving but a part of the integument or mucous membrane, and leaving scarcely any induration about the cicatrix, as the frequent precursors of syphilitic infection. He alluded to the different structures upon which such might appear. Ulceration (as generally understood) might scarcely affect such sores at all. When the induration proper to the specific morbid process had its seat in the hardness belonging to the seat of the sore, whether arising from the physiological properties of the affected tissues, or induced by irritation, an infecting sore, most difficult of diagnosis, resulted. When, moreover, the subject of the disease had a hybrid affection—i.e., sores of different characters upon the same spot, a pus-producing and infecting sore, capable of auto-inoculation, and attended with suppurating bubo, might be present.

Under the head of "observed facts," the author cited the following cases:—

1. The infection of a man by his wife, in whom a very trivial erosion existed upon the inner aspect of the left labium without induration or appreciable discharge.
2. The appearance of strictly circumscribed elevation upon the inner aspect of the prepuce of an officer, the epithelium upon which appeared dull; no trace of ulceration appearing until the part was irritated by the application of a powder, and then very limited in extent. There was a symmetrical enlargement of the inguinal glands, and he afterwards suffered from psoriasis palmaris, etc.

rupture generally occurs when no artificial means have been used; and also for having chosen the least of three evils,—would the jury have fixed upon £500 if he had destroyed the child? and upon £1,000 if he had left the mother, or perhaps both, to die? Hitherto, under such circumstances, I have risked a similar consequence; and, fortunately, without the occurrence of the contingency. How am I to act in future?

Surely one of "the three surgeons", or all together, will humanely publish directions for our future guidance. If a similar case presented itself, and they had conjointly the management of it, we might not hear of their practice with the result of it; and, as they found sufficient ground in the evidence given in reference to the case in question, they must feel that they have ability, and I hope they will have a will also, to give us the needful and therefore desirable instructions.

I am, etc., WM. ALLISON.

September, 1862.

THE LANCET AND THE BRITISH MEDICAL ASSOCIATION.

SIR,—If anything were wanted to prove the merits as well as the onward progress of the BRITISH MEDICAL JOURNAL under its present able management, it is afforded by the rabid anger of the proprietors of the *Lancet*, exhibited through the mouthpiece of their editor. What is the real grievance, but the patent fact that the early publication of the splendid intellectual products of the late annual meeting was likely to affect the *Lancet* in its trading capacity? It is absurd in the editor to find fault with you for wishing to have the privilege of first communicating the transactions of the Society which you represent. What would he say if any of those who contribute to his pages should at the same time send a copy of their communications to your JOURNAL or to the *Medical Times*? The animus is too patent; and the profession will doubtless regard the *Lancet* in this particular juncture as I do—with a feeling akin to contempt. I am, etc.,

A FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS,
AND AN OLD MEMBER OF THE BRITISH
MEDICAL ASSOCIATION.

September, 1862.

LONDON AND PARIS DIETS. The *Gazette des Hôpitaux* gives some statistics of food in Paris, as compared with London. According to these, the Londoner's nourishment is more substantial and invigorating than that of the Parisian. The consumption of bread is about equal in the two cities; but in London a large quantity of flour is used in family kitchens, in addition to baker's bread. Of butchers' meat, 20 per cent. more is eaten in London than in Paris; the difference of population, of course, being taken into account in all these estimates. Twice as much fish is used in London as in Paris. The consumption of butter, milk, poultry, and fruit is larger, however, in Paris than in London. Of colonial produce, tea prevails in London, and coffee in Paris. Of sugar, incomparably the larger quantity is consumed in the British capital; but this, we must presume, is attributable to the use of home-grown (beetroot) sugar in France, although the *Gazette* is not quite explicit on this point. As to drinks, beer prevails in London, and wine in Paris; but there is a tendency to an increase of beer-drinking in Paris and of wine-drinking in London. Paris, happily for itself, consumes far less spirits than London. "In a word", the *Gazette* concludes, "London has the advantage in respect of the solidity of its food; and this is but fair, for we have not to contend with an English climate."

Medical News.

UNIVERSITY OF LONDON. Bachelor of Medicine—Preliminary Scientific Examination. Pass Examination.

First Division.

Allen, Bryan Holme, University College
Archer, Herbert Ray, St. George's Hospital
Armitage, Frederick William, Guy's Hospital
Beck, Marcus, University of Glasgow
Berrell, Charles, King's College
Birt, Joseph, Sydenham College, Birmingham
Bond, Thomas, King's College
Cavafy, John, St. George's Hospital
Coombs, Carey Pearce, St. Mary's Hospital
Eastes, George, Guy's Hospital
Evans, John Tasker, St. Bartholomew's Hospital
Evans, Julian Augustus Michael, University College
Flint, Frederic, King's College
Greaves, Charles Augustus, St. Thomas's Hospital
Green, Thomas Henry, University College
Hilliard, Henry Charles, Guy's Hospital
Mason, Philip Brookes, University College
Mayou, Marmaduke John, Guy's Hospital
Nunneley, Frederic Barham, University College
Philpot, Charles William, King's College
Powles, Revett Coleridge, King's College
Read, Charles, University College
Roberts, Edwin, King's College
Smith, Charles, Guy's Hospital
Smith, James William, Guy's Hospital
Snow, William Vicary, University College
Tayler, Francis Thomas, B.A., Guy's Hospital
Tayler, George Christopher, St. Bartholomew's Hospital
Taylor, Arthur, Guy's Hospital
Trimen, Henry, King's College Hospital
Turner, Ebenezer Fulham, Guy's Hospital
Warren, Thomas Pickard, Guy's Hospital
Willey, Henry, King's College
Williams, John, University College

Second Division.

Barrett, John, Bristol and Bath United Hospital
Bott, Charles Glen, Guy's Hospital
Churton, Thomas, Leeds
Clothier, Henry, University College
Coxeter, James John, University College
Duke, Oliver Thomas, Guy's Hospital
Eccles, William Soltau, St. Bartholomew's Hospital
Fairbank, Thomas, St. Bartholomew's Hospital
Foster, Joseph, Royal Manchester School of Medicine
Glynn, Thomas Robinson, St. Bartholomew's Hospital
Groves, Joseph, King's College
Harvey, Walter Anstice, St. Bartholomew's Hospital
Irvine, James Pearson, Liverpool
Jackson, James, London Hospital
Kempthorne, Henry Law, King's College
Legg, John Wickham, University College
Lloyd, John, Queen's College, Birmingham
Lush, William George Vawdrey, St. Bartholomew's Hospital
Mackey, Edward, Queen's College, Birmingham
Murray, Thomas, St. George's Hospital
Perks, Charles, Queen's College, Birmingham
Prosser, Charles Howard, Marlborough College
Purvis, John Prior, St. Thomas's Hospital
Salter, John Henry, King's College
Savage, George Henry, Guy's Hospital
Seaman, Alfred Baird, King's College
Shuttleworth, George Edward, King's College
Stone, Robert Sidney, St. Bartholomew's Hospital
Willoughby, Edward Francis, University College

Examination for Honours.

Chemistry and Natural Philosophy.

Allen, Bryan Holme, University College
Berrell, Charles, King's College
Greaves, Charles Augustus, St. Thomas's Hospital
Mason, Philip Brookes (Exhibition), University College
Nunneley, Frederic Barham, University College

Biology.

Mason, Philip Brookes (Exhibition), University College
Powles, Revett Coleridge, King's College
Willoughby, Edward Francis, University College

APOTHECARIES' HALL. On August 28th, the following Licentiates were admitted:—

Duce, James, Wednesbury, Staffordshire
Flinn, John James, Liverpool
Hicks, John Abernethy, Emsworth, Hants
Hughes, David Watkin, Wymondham
Mowat, George, Plymouth
Trimmer, Francis, Gloucester

At the same Court, the following passed the first examination :—

Best, Frederick Arthur, St. Bartholomew's Hospital
Chapman, James, Grosvenor Place School of Anat. and Med.

APPOINTMENTS.

BRECHLEY, Horatio C., Esq.
BRINGLOE, John, Esq.
NICHOL, Robert, M.D.
OTLEY, John, Esq.
PUCKLE, George, M.D.
WEBSTER, George, Esq.
CARDELL, John M., Esq., appointed Deputy Coroner for the Southern District of the county of Wilts.
EDWARDS, William T., M.D., appointed Physician to the Glamorgan-shire and Monmouthshire Infirmary, Cardiff.
EVANS, John T., M.D., appointed Surgeon to Christ's Hospital, Bedford, in the room of the late R. D. J. Evans, M.D.
MORTON, William A., Esq., appointed Certifying Surgeon under the Factory Act, for Horwich, Lancashire.
ODELL, Thomas, Esq., appointed Surgeon to the Hertford General Infirmary, in the room of the late R. D. J. Evans, M.D.
PARSONS, John D. F., M.D., elected Resident Medical Officer to the Clifton Dispensary, in the room of Robert Watts, Esq.
PATRICK, Samuel A., Esq., appointed District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, Manchester.
RIGORD, M. Philip, appointed Physician in Ordinary to the Household of Prince Napoleon.

elected Medical Officers to the
New Camberwell Provident
Dispensary.

LUNATICS AT THE EXHIBITION. A number of the female patients from the Peckham Lunatic Asylum were last week taken to the Exhibition by Dr. Armstrong.

CAUSES OF DEATH. Last week there died a woman, aged 30 years, who had been afflicted with eczema and ichthyosis from birth. An infant was suffocated last week by sucking the India-rubber nipple of a feeding bottle into its mouth.

THE PASHA OF EGYPT. "During the stay of the Pasha at Neuilly, the two great lights of the medical faculty in Paris, Robert de Lamballe and Royer, resided with him, they being so constantly required that frequent visits would not even suffice."

THE FEMALE BLONDIN. The chief injury suffered by the Female Blondin was fracture of the neck of the thigh-bone, and some severe injury about one shoulder. The poor woman fell, she states, through having been forced to drop her pole in consequence of cramp of one of her hands.

VACANCIES. The following appointments are vacant :—Surgeon to the Royal Victoria Dispensary, Northampton; surgeon to the Northampton Borough Gaol; medical officers for the first district of the Wolverhampton Union, for the Union Workhouse at Redhill, and for the Edgware District, Hendon Union; medical officer for the third district of the Forehoe Incorporation, Norfolk; consulting accoucheur to the Western Dispensary, Westminster, by the resignation of Dr. Frederic Bird; house-surgeon and apothecary to the General Infirmary, Northampton.

PAPER. Among the botanical specimens sent over from Japan to the Société d'Acclimatation by M. Eugene Simon, there are a few young trees out of the bark of which the Japanese make very good and strong paper. In China, the bark of the *Broussonnetia papyrifera*, a kind of mulberry tree, is used; that of Japan is a variety of the same species, to which Van Sieboldt has given the name of *Broussonnetia Kaminoki*. Considering the daily increasing difficulty of meeting the demand for rags, which are sold at about £2 per cwt., the bark of this tree, imported from Japan, would prove extremely valuable to the paper trade, inasmuch as it would not cost more than half that price.

SOCIAL SCIENCE. The arrangements for the inaugural congress of the International Association for the Promotion of Social Science, which will be held in Brussels from the 22nd to the 25th inst., are now, we understand, nearly completed; and, from the number of dis-

tinguished men in all parts of the Continent as well as in this country who have promised their attendance and support, there is every reason to believe that the meeting will be of a highly interesting and important nature. We may mention, for the guidance of many who will be attracted to Brussels at the time of this meeting, that any information may be obtained at the office of the National Association for the Promotion of Social Science, 3, Waterloo Place, Pall-mall.

A NEW SPECIALITY. The Russian Government has ordered that a division of the Military Hospital at Kiew should be devoted to the detection of simulated diseases, the determination of the responsibility of delinquents, and the ascertaining whether a possibility or impossibility of continuance in the service exists, etc. The Professor of Medical Jurisprudence at the University of Wladimir has been placed at the head of this division of the Hospital. (*Med. Times and Gaz.*)

THE INTERNATIONAL TEMPERANCE AND PROHIBITION CONFERENCE. At this Conference, the following papers were read in the Scientific and Medical Section; Dr. James McCulloch of Dumfries in the chair :—Alcohol in Relation to the Nervous System; by Professor Kirk, Edinburgh. Alcohol in Relation to the Digestive System; E. G. Figg, M.D., Bo'ness, N.B. Does Alcohol Arrest Metamorphosis, and thereby Save Tissue? James M. McCulloch, M.D., Dumfries. Alcohol, Medical Men, Publicans, and their Victims; John Higginbottom, F.R.S., Nottingham. The Medical Profession in Relation to Abstinence and Prohibition; Henry Mudge, M.R.C.S., Bodmin. Alcohol not Needed as a Medicine; L. M. Bennett, M.R.C.S., Winterton, Brigg. On Continental Intemperance, and its Connexion with Insanity and Suicide; Dr. F. R. Lees, Leeds. Testimony of a Medical Man against the Use of Alcohol as a Medicine; B. Collette, M.D., Guernsey. The authors generally opposed alcoholic medication. In other discussions upon those papers, Dr. TRALE of New York, as the only representative of the Disunited States, denounced the use of alcohol for stimulating purposes.—Dr. MADGE, Mayor of Bodmin, said the visiting committee of the lunatic asylum there determined to reject alcoholic liquors from the regular diet of the institution, but were ordered by the medical inspectors in their annual round to restore them. The visiting committee complied with the rule, but allowed them to be used only as medicines. Accordingly, every patient prescribed intoxicating liquors was inspected once a week; and the result was, that in that lunatic asylum there was a large wing under this head.—The Rev. Mr. BRASSEY of Swansea suggested that a medical work be written recommending non-alcoholic treatment. It was very difficult for a sick man to resist the prescription of his medical alcoholic adviser, unless he was fortified with such a guide.—The following resolutions were adopted :—1. "That the recent experiments and discoveries of physiological science, confirming observation and experience in all climates, have clearly demonstrated that alcohol has no dietetic value; but that its use as a beverage, in any form or to any extent, is injurious both to the body and the mind of man." 2. "That the progress of medical science and experiment has exploded many theories on which the prescription of alcohol has been heretofore based, and has demonstrated not only its non-dietetic character, but also its non-medicinal virtue in a large range of diseases; that the scientific, as distinguished from the empirical application of remedies, requires that their specific properties and reactions should be understood—conditions never yet fulfilled in regard to alcohol; this convention therefore earnestly calls upon the members of the honourable profession of medicine not only to respect their own reputation as a body, but to bear in mind their grave moral and social responsibilities, in prescribing so questionable, so dangerous, and

so absurd an article. The convention would also press upon the friends of temperance the duty of insisting that alcohol, whenever prescribed under the plea of a supposed, or the justification of a real necessity, should be dispensed like other drugs, not by the publican, but by the apothecary."

Varieties.

ARSENIOUS VAPOURS. We could point to chimneys in populous districts in England which have unceasingly vomited forth arsenic by the ton during these last twenty years. And, so far as we know, not a single case of injury to man or beast has occurred in consequence. (*Times*.)

LOSS OF LEAD. The reader will have an idea of the prodigious amount of lead which may be saved when he is informed that in one year a large smelting establishment in the north of England obtained 800 tons of lead from the dust accumulated in their long flues! Expedients of various kinds, some of them costly, have been tried with a view to the complete condensation of lead-fume; but there is not one which is in all respects satisfactory.

LOCAL APPLICATION FOR THE CURE OF TINEA SYCOSIS. M. Bouchardat's *Annuaire Thérapeutique* for the year 1862, amongst other important formulas, mentions an application which M. Deconde has used with success for the destruction of the fungus (*Microsporon mentagrophytes*) which causes sycosis. Its efficacy appears unquestionable. The following is its composition:—Crystallised acetate of lead, 5j; thick cream, 3jss. Reduce the acetate to a fine powder; mix. The diseased parts should be covered at night with this compound, which renders depilation unnecessary, the salt of lead penetrating readily to the skin, and destroying the parasitic growth. (*Jour. de Méd. et Chir.*)

DOMESTIC EMPLOYMENT OF CASTOR OIL IN CHINA. In China, castor oil is constantly employed for the ordinary purposes of life, as we should use olive oil or butter, its evacuant action having become subtended by force of habit. The Chinese, however, sometimes forget that Europeans do not enjoy this immunity; and M. Stanislas Martin relates that several years ago some French envoys believed themselves to have been poisoned by the mandarins, who had invited them to dinner. All the dishes had been prepared with the oil of *palma christi*, which induced a terrible purgation; but happily the discovery was made before reprisals, for what appeared to have been traitorous conduct, were taken. (*Med. Times and Gaz.*)

READING OLD BOOKS. We may here record a fact of interest to the manufacturing public, and which we have never seen published. The late Mr. Alexander Wright, a surgeon of Birmingham, discovered the value of cyanides of potassium and sodium as solvents for silver in electro-plating. The application was immediately patented, and the patent was afterwards purchased by Messrs. Elkington and Co. This application has proved of immense value to the electro-plater in every respect. Mr. Wright was led to this important invention from reading a passage in Scheele's *Chymical Essays* (p. 405, London, 1786). So much for old books. At first Mr. Wright received a royalty of 1s. on every ounce of silver deposited; but after his decease, which took place not long afterwards, a different arrangement was made with his widow. (*Times*.)

RESEARCHES ON THALLIUM. Mr. William Crookes observes that the occurrence of a brilliant green line in some selenium residues, whilst examining them for

tellurium, led him first to suspect the presence of a new metal. In March, 1861, he announced definitely that the green-line substance was decidedly a new element. The position of the green line does not coincide with any definite line in the solar spectrum. According to Kirchhoff's theory, we must therefore assume that thallium is not present, at all events to any great extent, in the sun. Under the highest telescopic power of his apparatus, the line appears to be absolutely identical in refrangibility with a sharp, well defined line in the barium spectrum, to which Professors Buusen and Kirchhoff have given the name Ba δ. Pursuing the investigation, he was enabled in the following May, to give a further account of this body, and to propose for it the name of *Thallium* (symbol, Tl). *Thallium* in the pure state is a heavy metal bearing a remarkable resemblance to lead in its physical properties. Its specific gravity is, however, higher—about 12. The freshly-scraped surface has a brilliant metallic lustre, not quite so blue in colour as lead, and it tarnishes more rapidly than this latter metal. It is very soft, being readily cut with a knife and indented with the nail; it may also be hammered out and drawn into wire, but has not much tenacity in this form. It easily marks paper. The fusing point is below redness, and with care several pieces may be melted together and cast into one lump. There is, however, generally a loss in this operation, owing to its rapid oxidation. The metal itself does not appear to be sensibly volatile below a red heat. He has made no special attempts to determine the atomic weight; although, from two estimations of the amount of sulphur in the sulphide, it appears to be very heavy. He believes it to be above 100. He obtained this element in the pure metallic state, and exhibited it to several friends as early as January last. Thallium is soluble in nitric, hydrochloric and sulphuric acids, the former attacking it with greatest energy, with evolution of red vapours. (*Chemical News*.)

CONSUMPTION OF DRINKS. Twenty years ago the consumption of tea per head among the population of the United Kingdom was only 1.37 lb.; since then the duty has been reduced from 2s. 2½d. per lb. to 1s. 5d., and in 1861 the consumption per head was 2.67 lbs., and the revenue received had risen from 2s. 11½d. per head to 3s. 9½d. Of coffee the consumption twenty years ago was 1.06 lb. per head; the duty has been very greatly reduced, and the consumption per head in 1861 was 1.21 lb.; the increase of consumption has not been so great as in tea, and the population contributed on 7½d. to the revenue in 1861 only 3½d. per head, instead of 7½d., which was the rate in 1841. The consumption of sugar was 17 lb. per head in 1841; the duties have since been reduced and equalised, and the consumption more than doubled; in 1861 it was 35.21 lbs. per head, and the revenue obtained was 4s. 2½d. per head, having been only 3s. 10d. in 1841. If now we take a stronger class of beverages, we find malt showing little change; the rate of consumption per head was 1.35 bushel in 1841 and 1.49 in 1861, and the rate of contribution to the revenue per head in this respect 4s. 1d. in 1841, and 3s. 8½d. in 1861. The wine duties, it will be remembered, have been greatly altered, and the consumption of wine rose from 6,184,960 gallons in 1841 to 10,693,071 in 1861, or from 0.23 gallon per head to 0.37, the rate of contribution to the revenue per head in taxation upon wine falling from 1s. 3½d. to 10d. The duty on British spirits has been raised considerably, and the amount of duty received is greatly increased, but the consumption has somewhat fallen off; in 1841 the rate consumed was 0.77 gallon per head, and the individual contribution to the revenue 3s. 8½d.; in 1861 the consumption was 0.67, and the contribution to revenue 6s. 7½d. But on foreign spirits the duty has been reduced; hence, though the consumption has largely increased, the contribution to revenue remains about the same, 1s. 0½d. per head, the

