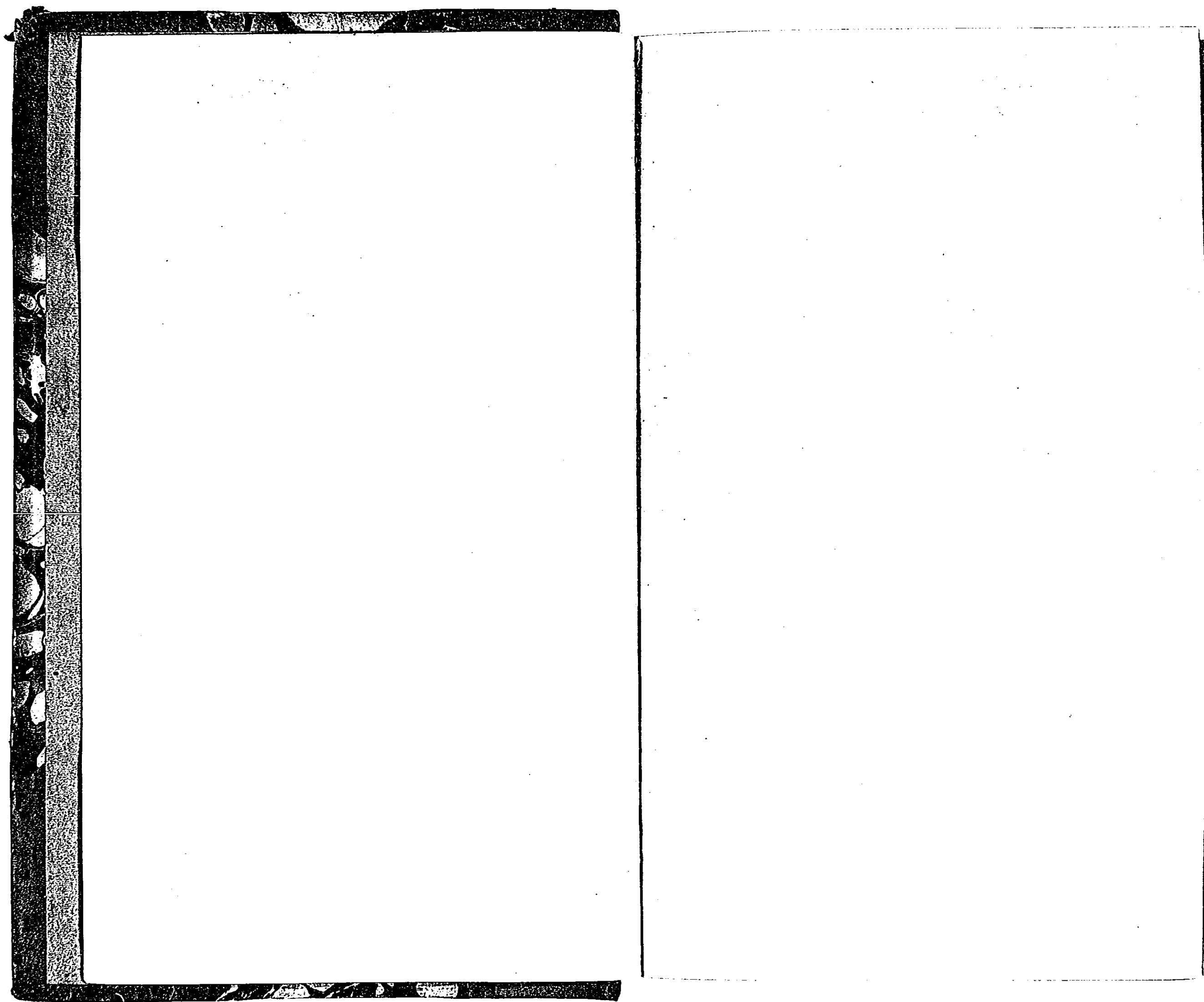


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OF

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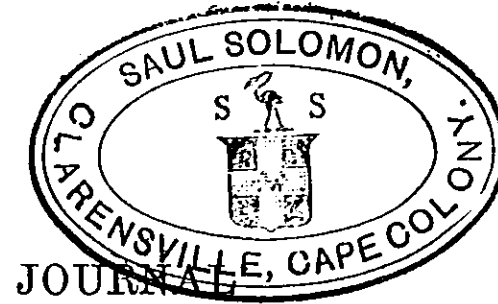
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QUARTERLY JOURNAL

OF THE

STATISTICAL SOCIETY.

MARCH, 1861.

REPORT to the STATISTICAL SOCIETY on the Proceedings of the Fourth Session of the INTERNATIONAL STATISTICAL CONGRESS, held in LONDON, July, 1860. By JAMES T. HAMMACK, Esq., F.S.S., one of the General Secretaries of the Congress.

[Read before the Statistical Society of London, 18th December, 1860.]

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I.—Introduction.

SINCE the first organization of the International Statistical Congress this Society has naturally felt a deep interest in its proceedings; and after each meeting of that body, it has been our custom to receive from one of the Fellows present on the occasion, some account of its labours. Although the Fourth Session of the Congress has recently been held in our midst, and the circumstances attending it are still fresh in the recollection of many now present who took so useful and prominent a part in the proceedings, it has seemed good to the Council of the Society not to depart from the established practice. Indeed, they consider,—and I think we shall all concur in the opinion,—that the assembly of the Congress in this metropolis must be regarded as an event full of happy omens for the cause of Statistical Science in this country, and in the highest degree interesting to English statisticians. Even to those who were personally concerned, whether as active participators or merely as interested spectators, an opportunity of reviewing the work of the Congress, and of discussing its forms of procedure, will not be unacceptable; while to them and to all of us, the late gathering of men of different nations, devoted to the same pursuits, and animated by the same

motives as ourselves—men brought together by an earnest desire for guidance, instruction, and mutual support in our own department of study—cannot be a topic devoid of interest or unworthy of attention.

In complying with the invitation of the Council to lay before the Society a report on the proceedings at the recent meeting, I cannot help wishing that the task had been confided to other hands competent to do full justice to the subject. I am conscious of the disadvantage of following such eminent statisticians as Professor Levi and Mr. Samuel Brown, whose facile pens have described the work of the previous meetings of the Congress. I may venture to lay claim, however, to one essential attribute of the truthful historian, namely, a personal and familiar knowledge of all the circumstances and events to be brought under notice; the humble part which it was my privilege to fill has given me this single advantage, and I rely upon the wonted indulgence of the Society to overlook the other deficiencies of the narrator in the faithfulness of his narrative.

I will not detain you by referring to the origin of the International Statistical Congress; it is a matter of history. Nor need I particularize the objects it seeks to accomplish, or the means it adopts to attain them, as they are well known to this assembly. Suffice it to remark, that although there is a considerable analogy between the Congress and the peripatetic associations so well known in this country and on the Continent, and so useful in keeping alive an interest in science by their periodical gatherings in different localities, in one peculiar feature of its constitution, the former is essentially different. The distinctive character of the Statistical Congress is derived from the fact that it is convened and carried on under the immediate auspices of the Government of the country in which it is held; and it is formed of the representatives of different nations, whose deliberations are assisted by other statisticians specially invited to attend. The usefulness and the very existence of the Congress depend, in a great degree, upon the authority and support extended to it by the Governments of Europe.

On the occasion of the Third Session, held at Vienna, in 1857, Dr. Farr, who attended as the delegate from England (his colleague, Mr. Fonblanque, having unfortunately been prevented by an attack of illness from reaching the Austrian capital), was authorized to state that if it should be considered desirable that the Fourth Session should be held in London, Her Majesty's Government would be happy to receive the Congress. He further stated, that although its reception in London might be less brilliant than it had been in the imperial cities of Paris and Vienna, he believed it would be as cordial, and, referring to the geographical position of England as offering no obstacle, he added, in the happiest terms:—"To our

"islands of the West representatives may readily come from the States of America, and from distant colonies, where statistics are cultivated under various circumstances. England is the centre of a large part of the civilized world. But some one says, England is divided from the Continent by the sea. Well, Gentlemen, in remote ages, Celts, Italians, Saxons, Danes, and Normans, unappalled, crossed the sea, founded colonies, and settled in England. Come, then, and visit the descendants of your ancestors: they will give you a hearty welcome."

Such sentiments as these could not fail to meet with a hearty response; the assembly expressed the most friendly feeling towards this country, and separated with the idea that its next meeting would be held in London in 1859. This expectation, however, as to the time of reassembling was not destined to be realized, owing to various circumstances which suggested the expediency of a postponement until the present year. The Congress had hitherto met every second year, but no rule of its constitution required that its meetings should take place at regular intervals.

Last autumn Her Majesty's Government repeated the expression of their willingness to receive the Congress during the present year, and the Austrian Commission, with whom the decision rested, at once accepted the invitation. We are accustomed to hear a good deal about Routine, Red-tapeism, and Circumlocution, but these great obstructive potentates appear to have lost their reputed powers in reference to the Congress,—an innovation of the most remarkable kind, claiming not merely toleration and protection, but requiring to be organized and conducted under the direct authority of the Government. Despite the strong conservatism of the official mind, the way "not to do it" remained undiscovered in this instance.

II.—*Preliminary Arrangements.*

I should imperfectly perform the duty I have undertaken, were I to omit to notice a few of the principal matters connected with the arrangements for the reception of the Congress. Of the preliminary proceedings in connection with the previous Sessions, we necessarily know nothing; we could only judge of the effect after the raising of the curtain. By glancing at the work of preparation not presented to the public eye, we may somewhat mar that effect, but we shall acquire a better idea of the difficulty of the task, of the amount of labour and co-operation necessary to its accomplishment, and the various accessories contributing to a successful result.

As soon as it was definitively settled that the Congress would assemble in London, it became apparent that no time was to be lost in making arrangements for its reception. It devolved upon the Board of Trade to initiate these arrangements, and the President,

Mr. Milner Gibson, at once appointed a Provisional Committee consisting of a few gentlemen connected with different public departments, with the honorary Secretaries of this Society, to act until the usual Organization Commission should be formed. This committee met in January last, and applied itself to the consideration of practical details. To facilitate business, it nominated a sub-committee, consisting of the Right Hon. W. Cowper, M.P., Mr. Fonblanque, Dr. Farr, Mr. Valpy, and myself, afterwards the Executive Committee of the Congress. After ascertaining the convenience of the expected foreign members, the meeting was fixed for the 16th July, in order that it might take place before the rising of Parliament. Invitations to the different Governments of Foreign States to nominate delegates were forwarded through our diplomatic agents abroad, and the Colonial Office undertook that representatives of the principal British Colonies should be appointed. The introduction of the latter element in the *personnel* of the Congress was a novelty, but I think no one here will question the wisdom of this arrangement which formed so useful and interesting a feature in the composition of the assembly. It was suggested by Dr. Farr and adopted by the committee solely with the desire of extending the usefulness of the labours of the Congress over as wide an area as possible, and not from any feeling of vain-glory, although England may well be proud of her colonial possessions, for she has known how to colonize, and in her great and distant provinces has spread her language and free institutions over every quarter of the globe. In most of the colonies the value of statistics is appreciated, but in some the more engrossing occupations of the colonists have led to a neglect of statistical inquiry. What better plan of teaching by example could be followed than to introduce delegates from our colonial dependencies into an assembly where they would learn something of what the old nations of Europe were doing in this respect, and meet the eminent men whose lives have been devoted to this branch of human knowledge? By the course pursued, the distant but important members of the British empire will profit by the teachings of the Congress no less than the mother country herself.

The committee conceived the idea of compiling a digest of British statistics from reports furnished by the different public offices, a work which they hoped Foreign States might be induced to imitate; but it was found impracticable, owing to the pressure of other business, to prepare the document in time, although several valuable papers were contributed.

Amongst other matters which occupied the attention of the executive officers at this time, was the selection of a suitable edifice for the meeting. That any difficulty should have been experienced on this head in the largest city in the world, where great public

buildings meet the eye on every side, is rather remarkable; but it is nevertheless true, that the First Commissioner of Public Works and Buildings, when disappointed in the expectation of obtaining the use of apartments occupied by the learned societies at Burlington House, found himself considerably embarrassed in obtaining fitting accommodation. At this juncture, the authorities of King's College, at the instance of Dr. Guy, placed the large hall and other portions of their establishment at the service of the committee; and the Councils of the Society of Antiquaries and the Geological Society having, with equal liberality, accorded the use of their apartments in Somerset House for the meetings of the Sections, all further difficulty was removed, and a *locale* rendered appropriate by its official, scientific, and educational associations, was secured.

The enlarged Commission of Organization was now formed. Consisting of about eighty noblemen and gentlemen, it included the names of distinguished members of both Houses of Parliament without distinction of party, of men eminent in science, and of others who had paid special attention to statistics. Its first duty was to determine what subjects should be included in the programme to form the basis of the deliberations of the Congress. On this all-important question a report was submitted to the Commission by Dr. Farr, and I think all who have read that interesting essay, will pronounce it to be a most valuable contribution to the literature of statistics. Tracing the progress of the science from the time of Sir W. Petty to our own day, Dr. Farr shows the importance which has been attached to it in England and all civilized states, and, defining the true province of the statist, he stands forward to repel the hostile criticism to which statistics, in common with every other science, has been exposed. The principal statistical works of this country, from the Domesday Book to our modern census, are passed in review, and the names of the principal cultivators of political, mathematical, vital, and financial statistics are honourably mentioned. The practical work and objects of the Congress are lucidly explained, and the proposal to constitute six Sections is then put forward, with the names of the gentlemen who had promised their assistance.

The plan proposed by Dr. Farr was unanimously adopted by the Commission, and as a comparatively short period of time now remained for the preparation of the programme, great exertions were necessary on the part of all concerned. It is a simple act of justice to the writers of the several portions of the programme—most of them men immersed in important professional or official engagements—to say that, in setting aside their pressing avocations to attend to the business of the Congress, they performed a generous act of self-devotion, and well deserved the special thanks which his

Royal Highness the Prince Consort desired might be conveyed to them from him for the services thus rendered to their country.

For the First Section, Mr. Leone Levi, who is well known to be one of the first who urged the necessity and importance of collecting Judicial Statistics in this country, undertook to write the portion of the programme on Civil and Criminal Statistics; and Mr. Hill Williams prepared a paper on the Statistics of the Subdivisions, Transfers, and Burdens of Real Property. The papers for the Second Section (Sanitary Statistics), were written by Miss Florence Nightingale, Dr. Sutherland, and Dr. Farr. For the Third Section (Industrial Statistics), papers were prepared by Mr. Caird, M.P., and Mr. Donnelly, Registrar-General of Ireland, on Agricultural Statistics; and by Mr. R. Hunt, on the Statistics of Mineral Produce and of Mining. The principal portion of the programme for the Fourth Section (Commercial Statistics), was prepared by Mr. Newmarch, on Methods of Investigation as regards Statistics of Prices and Wages in the principal Trades,—a valuable paper, which I am glad to observe enriches the pages of the last number of the Society's *Journal*; Mr. Crawford contributed a short paper on the Statistics of Banks. For the Fifth Section, which embraced the Census, and Army and Navy Statistics, the papers were prepared by Dr. Farr and myself on the first subject; and by Sir R. M. Bromley, Dr. Bryson, Dr. Balfour, Mr. Hodge, and Dr. Sutherland, on Naval and Military Statistics. Lastly, for the Sixth Section, which took a somewhat wide range of subjects, the papers were by Dr. Guy, on Statistical Methods and Signs; by Mr. Winter Jones, on the Statistics of Literature; by Mr. Samuel Brown, on Statistical Units; by Mr. Valpy, on International Statistical Abstracts; and by Admiral Fitzroy, on Meteorological Observation. The mere mention of several of these names is a sufficient guarantee for the ability with which most of the subjects were treated.

But the task of preparing the programme was not finished even when all these papers were written and seen through the press, forming, when printed, a quarto volume of more than 200 pages. For the convenience of the foreign members of the Congress, it was necessary to provide an edition of the programme in *French*, and on a short notice it was not easy to find persons competent to translate papers abounding in technical expressions into that language. The Committee were fortunate, however, in obtaining the assistance of competent translators in London, and some portion of the work was performed by M. Maurice Block, of Paris. At the establishment of Messrs. Eyre and Spottiswoode, the Queen's Printers, the printing of the French edition was very creditably performed, although the compositors and others employed were exclusively Englishmen. It will readily be conceived that a programme composed of twenty-four

distinct papers, written by twenty persons, and printed in two languages, occupied a considerable time in preparing; and notwithstanding the great exertions of the editor, Dr. Farr, and the most effective co-operation on the part of the writers, it will scarcely be a matter of surprise that it was completed only just in time for the meeting of the Congress.

But the disadvantage which no doubt resulted from the unavoidable delay attending the production of the programme, was, in a great degree, atoned for by the plan adopted of stating at the end of each paper the several propositions or resolutions to be discussed, the rest of the paper being regarded as merely introductory. These propositions were referred to Committees of Sections, consisting of statisticians and others specially conversant with the subjects, by whom they were examined, and modified where necessary. The Presidents and Vice-Presidents of the Sectional Committees which were thus formed on the plan adopted by the British Association and other societies, were afterwards chosen to preside over the Sections of the Congress, and the Secretaries also, in like manner, continued their efficient services.*

III.—*Proceedings of the Congress.*

The course of events has now brought us to the opening of the Congress, which took place on Monday, July 16th, 1860. Most of the official delegates had arrived in London during the previous week. Twenty-four different countries, including the principal States of Europe, the United States of America, and Brazil, were represented; and in addition representatives attended for thirteen of the most important British Colonies. The delegates appointed for Sardinia and for Canada unfortunately failed to arrive in time. In the large hall at King's College were assembled, besides the official delegates, several of the foreign Ambassadors and Ministers, the Secretary of State for Foreign Affairs, the President of the Board of Trade and other Members of the Government, Lord Brougham, Earl Stanhope, the Earl of Shaftesbury, and other noble lords, several Members of the House of Commons, and about 400 gentlemen, including the heads of the principal learned and scientific societies of the metropolis, who had been specially invited to take part in the proceedings of the Congress. The business of appointing the officers and of agreeing to rules for the regulation of the assembly having been disposed of at a preliminary meeting, His Royal Highness the Prince Consort took the chair, as President, at 4 P.M., and opened the Congress with an inaugural address, no less remarkable for its

* Mr. T. Michell, F.R.G.S., now of the British Legation of St. Petersburg, and Mr. W. Clode, of the Registrar General's Office, Somerset House, besides acting as Secretaries of Sections, rendered valuable assistance to the Executive in carrying out the arrangements.

eloquence and philosophic spirit, than for its eminently practical character and perfect suitability to the occasion. This admirable address has been printed in our *Journal*. The proposal of Lord Brougham that the meeting should give vent to its feelings of gratitude and respect to his Royal Highness for the signal service rendered by him to statistical science, was received with enthusiasm.

On the second day (Tuesday), the six Sections met at 10 A.M., in their respective rooms, and having elected their officers, proceeded to the discussion of the portions of the programme referred to them. His Royal Highness the Prince President visited each of the Sections during the morning, and evinced a lively interest in the proceedings. The General Meeting assembled at 2 P.M., the Right Hon. W. Cowper, M.P., Vice-President, in the chair. The reception of oral reports of the Foreign Delegates on the progress of statistics in their respective countries since the last meeting of the Congress, formed the principal business of the day. As these reports, which might be made either in French or English, are full of interest, I propose to submit a brief abstract of the most important of them.

His Excellency BARON CZERNIG, Delegate for Austria, and President of the Vienna meeting of the Congress, referred to the impulse given to statistical inquiry in connection with recent reforms in that empire, and described the labours of the department under his direction. In 1857 a census of the whole of the Austrian empire had been taken on a uniform plan, in conformity with the recommendations of the Congress. Reports on the statistics of the subdivisions of land (by Baron Czernig himself), on several branches of industry, on the mercantile marine, on the state railways, on the hospitals of Vienna, and on indirect taxation, had been published. Other works were in progress, some of which had been interrupted by that potent enemy of science—war.

DR. VON HERMANN, Delegate for Bavaria, briefly described the progress of statistics in that kingdom. A special census had been taken of the deaf-and-dumb, the blind, and the insane, and an important work on suicides had been prepared, together with special reports on railways, postal service, mines, and salt works. The cadastre was nearly completed; 26,000 cadastral maps were on sale, and every landed proprietor in Bavaria could obtain an exact map of his estate for *sixpence*. Dr. von Hermann exhibited some tables of mortality prepared on a new plan, the deaths in each year of age being compared with the births of the year in which the deceased were born. A curious result had been evolved, namely, that when the births were most numerous, the vitality of the generation was greatest.

M. QUETELET, Delegate for Belgium, and President of the First Session of the Congress, read an interesting statement prepared by

M. Heuschling, who was unable to be present, describing the recent labours of the Belgian Central Statistical Commission. Its publications had embraced Electoral Statistics, Statistics of the deaf-and-dumb and blind, of the militia, of the finances of the communes, &c. Of the general census of 1856, only a preliminary account had been published; the detailed tables, however, were in the press. Agricultural statistics had been collected in conjunction with the census. The record of the causes of death, although still imperfect, had been found useful. A royal decree of May last, had offered a prize of 20,000 francs to the best works on the progress of Belgium since 1830.

M. DAVID, Delegate for Denmark, noticed the works of the Danish Board of Statistics, prepared under his direction, on various subjects, including Commercial Statistics, Criminal Statistics for the fifteen years 1845-54, births, deaths, and marriages during the same period, and suicides during the years 1845-56. Concerning suicides, M. David stated that in Denmark the proportion to the population (26.4 annually to 100,000 living) was more than twice as great as in France, Prussia, and Norway, and more than threefold as compared with England, Belgium, and Sweden; but he ascribed these differences mainly to the fact of the returns in other countries being less accurate than those of Denmark, where, however, the propensity to suicide unhappily prevailed in a high degree.

DR. ASHER, Delegate for Hamburg, Bremen, and Lubeck, gave an account of the statistical documents drawn up under official authority, chiefly relating to the commerce and consumption of the Hanse Towns.

PROFESSOR WAPPÄUS, of Hanover, reported on the proceedings of the Statistical Bureau of that kingdom. In addition to the regular publications, new volumes had been issued on Criminal Statistics—the first report of the kind—and on Agrarian Statistics. From the latter it appeared that the redemptions of seignorial rights and charges had been so numerous, that by far the greater portion of the landed property is now in the possession of small freeholders. Professor Wappäus dwelt on the importance of the Statistical Departments in the German States acting in concert, the relations between the States being too intimate to admit of separate action with success. We may hope that the attainment of this object will be amongst the other fruits of the Congress.

DR. ACKERSDYCK, Delegate for Holland, said that the system of mystery long maintained by the Government of the Netherlands, had been completely abandoned, and important statistical documents were now published. Since 1851 each province had had its Statistical Bureau, and a Central Commission had been established recently in compliance with the suggestion of the Congress. It was an inde-

pendent department, empowered to call for returns from all the branches of administration, and to control all the official statistics.

M. DE BAUMHAUER, the other Delegate for Holland, presented an elaborate paper, affording a comparative view of the penal legislation of Saxony, France, Belgium, and the Netherlands, and reported amongst other matters that a record of the causes of death had been commenced, and that the task of analyzing the census returns of 1859 was in progress in the provincial offices.

BARON MALTZAHN, of Mecklenburg-Schwerin, reported that the statistical department in that duchy had continued its investigations respecting territorial subdivisions, the climate, the movement of the population, the mercantile marine, savings' banks, postal administration, &c. It had also drawn up and published tables showing the amount of game and wild animals killed in the years 1849-56.

PROFESSOR DAA, Delegate for Norway, described the nature of the statistical information collected at the last census of that country in 1855, and also of that furnished by the various branches of the public service. Sanitary statistics had received considerable attention, and the classification of the causes of death had established several important facts; amongst others, that the remarkable disease elephantiasis, although it had spread amongst the fishing districts and along the coasts, was rarely found in the interior, and was by no means so fatal as had generally been believed. Mental diseases were, however, more prevalent in Norway than in most other countries, and the returns on the subject were peculiarly valuable, because from the sparseness of the population and the fact of people usually remaining where they were born, the influence of hereditary circumstances could readily be traced.

DR. WERNADSKI, Delegate for Russia, stated that the Government of that empire had taken great interest in the labours and recommendations of the Congress, and had established in 1858 a Central Statistical Commission, composed of members representing the different public departments. In order to secure a solid basis for the collection of the returns, local superintendents of statistics had been appointed in the provinces. M. de Bouschen had been charged with the special duty of visiting the different countries of Europe for the purpose of studying the purely practical part of statistical science. Preparations were in active progress for the forthcoming census of Russia, to be taken on the principles adopted by the Congress. The operation of numbering the people of this vast empire was one of no ordinary difficulty, and the first step was to obtain a complete list of inhabited places, since, owing to the migrations of the peasants, and the frequent fires in the villages composed of houses of wood, these were by no means fixed. The delegate described the statistical reports which had been published, including

one by M. Troinitski on the serfs, furnishing materials of the greatest value in carrying out the work of emancipation. Exact information had been collected with respect to the distribution of real property and the value of its produce. The War Minister had fifty-six staff officers in the provinces reporting on the military resources of the country; the reports, filling fifty or sixty volumes, were corrected periodically. Dr. Wernadski's statement, which deserves a more extended notice, abundantly proves the popularity of statistics in Russia.

M. HOFF, Delegate for the Saxon Duchies, gave a brief account of the statistical works published since the previous Congress, including the returns of the census of Saxe Meiningen, taken in 1858. This delegate, whose name is so well known in connection with the Gotha Life Insurance Company, presented some valuable papers, prepared by himself, on the operations and results of the life insurance companies in Germany.

M. G. VOET (Switzerland), announced the creation, in June last, of a Federal Statistical Bureau, under the direction of the Ministry of the Interior at Berne. Conformably with the recommendations of the Congress, the census, heretofore taken every twenty years, was to be taken in December this year, and to be repeated decennially. The delegate referred in suitable terms to the lamented deaths of the eminent Swiss statisticians, M. Franscini and Dr. Marc d'Espine. We must all feel that the loss of such men is not confined to the country to which they belonged.

AGOP EFFENDI, Delegate for Turkey, stated that although no statistical works had been published by the Ottoman Government, important official returns existed as the result of the labours of the Statistical Bureau founded by the Sultan Suleiman. The 159 provinces had each a superintendent of statistics, with assistants by whom reports were annually prepared on the births, deaths, number of travellers, the sanitary service, transfers of property, the losses by fire and epizootics, and on other matters.—It is to be regretted that the Turkish Government, which has been twice represented at the Congress, and has evinced a strong desire to profit by its teachings, has not followed the example of other States in publishing the information, or at least the principal results, collected through the extensive agency described by the delegate.

On the third day the official delegates continued their reports. The Brazilian Minister in London, the Commander de CARVALHO MOREIRA, representing Brazil, after referring to the importance attached to social phenomena as displayed by statistics, under a Parliamentary Government like that of Brazil, described the reports made by each of the six Ministries—of the Interior, Finance, Justice, Marine, War, and Foreign Affairs—at the commencement of each

session. These reports placed before the two Chambers a complete view of the progress of the empire, as exhibited by statistical tables carefully and systematically arranged. In separating from the parent state thirty-eight years ago, Brazil had found itself in the enjoyment of all the elements of independence, but had hitherto neglected to count the numbers of the people,—nations, like individuals, the delegate well observed, being too apt to leave untold the wealth of which they have the uncontested possession,—but arrangements were now in progress for taking the first census, a work attended with unusual difficulties in the vast country extending over the basin of the Amazon. The Statistical Society founded at Rio de Janeiro, in 1854, had collected materials for the general statistics of the empire; it had branches in the provinces, and published a quarterly journal.

M. LEGOYT, Delegate for France, described the publications of the Statistical Department in Paris. He invited special attention to the financial statistics of France, remarkable alike for their complete information and perfect good faith. The budget he described as the key to all the institutions of the empire—administrative, financial, political, military, religious, and civil—in a word, the dictionary of France. The subsequent reports published by each of the public departments gave all the details of the expenditure duly verified. A precise account of the army and navy, men, horses, ships, arsenals, projectiles, arms of every description, was annually published; the elements of the armed force of the country being thus made known to the world with a degree of minuteness and fidelity unusual in other States. Amongst the most important statistical reports recently published, were volumes on the births, marriages, and deaths, 1855-57, and on the census of 1856. A report on "*L'Assistance Publique*," comprising 1,500 hospitals and asylums, 12,000 charitable institutions (*bureaux de bienfaisance*), and many other similar establishments, for the years 1842-54, was published in 1858. M. Legoyt referred to the statistical labours of other branches of the public service, every one of which, he said, published documents affording full information concerning its operations.

DR. ENGEL, Delegate for Prussia, and formerly Director of the Statistical Bureau of Saxony, after paying a just tribute to the memory of his distinguished predecessor, M. Dieterici, whose sudden death occurred last year, described the circumstances under which unexpectedly, and without solicitation, he had been placed at the head of the Statistical Department at Berlin. The bureau was created in 1805, and for more than fifty years had zealously prosecuted its work. A Central Commission was shortly to be created. In no country in Europe, except in England, perhaps, was the demand for statistical information on the part of the

Government, the two Chambers, and the public, greater than in Prussia.

PROFESSOR SCHUBERT, the other Prussian Delegate, and a Member of the Chamber, confirmed the statement of Dr. Engel as to the appreciation of statistics by the Government and the two Chambers, adding that a constitutional system like that of Prussia demanded the most profound and extensive application of statistical science, in order that all political action might be guided or illustrated by its light.

DR. BERG, Delegate for Sweden, announced the creation of a Central Statistical Commission at Stockholm in 1858. It consisted of members of the different public departments, and had exclusive charge of the statistics of population, while it devised all the forms in use in other branches of the service. The registration of births, deaths, and marriages, was in future to be carried out on the model of the English system, and the causes of death were to be recorded on the principles approved by the Congress. The delegate noticed some facts respecting the diminution of crime, the reduced production of distilled spirits, and other results derived from the systematic collection of facts under the departments he so ably directs.—The Scandinavians are good statisticians, and in Sweden, where the value of statistics was early recognized, the science is still cultivated with unabated ardour.

COUNT RIPALDA (Spain), adverted to the formation, in 1856, of a Central Statistical Commission at Madrid, with branch commissions in the departments, through the agency of which a nearly exact census had been taken in 1857.

DR. JARVIS, President of the American Statistical Association, communicated a valuable statement respecting the Vital Statistics of the United States.

The delegates for the British Colonies then proceeded to make their reports, which occupied the general meeting during the remainder of the third day and during the greater part of the fourth. Of these statements it would be impossible to give even the most meagre analysis within the limits of the present paper, especially as they present rather a statistical account of the several colonies than an account of the organization of the colonial statistics. A bare mention of the names of the delegates, most of them distinguished colonists who had been Members of Council, or had filled other important posts in their respective colonies, must suffice. The Australasian Colonies were represented by eight delegates, namely, New South Wales by Sir Stuart Donaldson, Mr. E. Hamilton, and Mr. J. Macarthur; Queensland by Mr. Marsh, M.P.; Victoria by Mr. W. Westgarth; South Australia by Mr. E. Stephens; Tasmania by Mr. J. A. Youl; and New Zealand by Mr. J. E. Fitzgerald. These

gentlemen made a joint report, prepared with great care and ability. Mr. Walker, Secretary to the Government in British Guiana, reported on that colony; Mr. W. Field on the Cape Colony; Sir Charles MacCarthy, Governor of Ceylon, on that island; Mr. S. Cave, M.P., on Jamaica and Barbadoes; Mr. G. Propier on the Mauritius; and Mr. Drummond Woolf on the Ionian Islands. In the absence of a delegate for India, Mr. Hornidge, the head of the Statistical Department in the India Office, presented an able digest of the Statistics of British India.

DR. FARR then briefly noticed the steps taken in Great Britain to give effect to the previous recommendations of the Congress. In relation to Judicial and Industrial Statistics, some advance had been made, and an extended educational inquiry was in progress under a royal commission. Attention had been called to the great defect in our finance accounts and in the estimates laid before Parliament, namely, the omission to show the quantities or values of the "stock in hand" at the beginning and end of every year. The defect had been admitted by our ablest financial officers, and Dr. Farr hoped the Congress, at its next meeting, would learn that it had been removed, as well as the reproach that Ireland was the only part of Europe without a registration of births and deaths.

MR. VALPY followed with a few observations on the changes and additions made in the publications of the Statistical Department of the Board of Trade.

Thus from the mouths of the representatives of the principal civilized nations of the world, the Congress learnt, and we learn also, the general progress of statistical inquiry, and the estimation in which this branch of knowledge is held. Countries far behind others in many respects, not only appreciate its value, but desire to be directed by its light; and abundant evidence is afforded that the seeds sown by the Congress have already yielded a goodly harvest.

At this stage of the proceedings, our valuable hon. secretary, Mr. Newmarch, having been invited to give some account of the work of this Society, said, that while its position was unofficial and perfectly independent, the Society might claim the merit of having originated the systematic cultivation of statistics in this country, the success of its efforts being proved by its present vigorous condition. He then noticed the different classes of subjects which had from time to time more especially engaged the attention of the Society, and concluded his statement by remarking that so long as its labours were useful, it would obtain the support of the intelligent public; and when it ceased to command that support by its own intrinsic merit, its mission would be at an end,—an observation pronounced by Lord Brougham, the chairman of the day, to be "correct, sensible, and judicious."

After a special report from M. Quetelet on a plan for publishing in each country, and in the same form, a general table embracing all the principal statistical facts as a basis for the comparative statistics of nations, the important business of receiving reports of the decisions arrived at in the several Sections occupied the attention of the general meeting. These reports were made, usually by different reporters, both in English and French, and the resolutions they embodied were, except in two or three instances, adopted by the Congress. It appeared to be understood that the conclusions arrived at in the Sections were the result of more deliberate discussion than could possibly take place in the general assembly, and moreover, that the decisions were occasionally to be regarded as compromises. To look for perfect unanimity amongst the representatives of so many nationalities, or even amongst any considerable number of scientific men, including of course many mere theorists, of any one nation, would be Utopian; and no wise statist will altogether reject materials which may in any way serve to strengthen the foundations of the fabric he desires to raise, when others less rough and crude cannot be obtained.

The Sections met on each day usually at 10 A.M., and sat until 1 P.M. By a judicious division of the time set apart for their deliberations, they succeeded in examining the several parts of the programme, and in two or three instances other papers submitted by individual members were discussed, and resolutions agreed to upon them. The real work—the deliberative work—of the Congress was done in the Sections; and it is a matter of regret to me that my space will not allow me even to name a few of the gentlemen whose judgment, ability, and practical acquaintance with the different subjects, contributed in so eminent a degree to the interest of the discussions, and to the adoption of sound views with reference to the statistical bearings of the several questions dealt with. Nor would these names, could they be mentioned, be restricted to those of our own countrymen, for the great assistance rendered by the foreign members of the Congress in every Section was conspicuous to all. In obtaining the co-operation of the distinguished noblemen and gentlemen who acted as Presidents of Sections, the Executive Committee were most fortunate. Who could so fitly preside over the Judicial Section as Lord Brougham? or over the Sanitary Section as the Earl of Shaftesbury? Lord Stanley was unfortunately prevented from being in London to fill the chair in the Industrial Section, but was ably represented by the Vice-President, Sir Roderick Murchison. Mr. Nassau Senior, was the efficient President of the Commercial Section; and Earl Stanhope presided over the Section charged with the consideration of the

Census and Military and Naval Statistics with perfect urbanity and admirable tact, conducting the proceedings for the most part in French, in deference to the numerous foreign delegates attending the Section. M. Quetelet, as President, with the Belgian Minister, Mr. Monckton Milnes, M.P., and Mr. James Heywood, as Vice-Presidents, conducted the discussions on the somewhat varied list of subjects treated by the Sixth Section with very satisfactory results. The Presidents received valuable aid from the Secretaries of Sections—all of them able practical men of business, to whom the Executive also are under deep obligations for their services, not only in recording the proceedings in their respective Sections, but also in preparing the shorthand writer's notes for publication in the General Report.

A concise statement of the reports brought up from the Sections may afford some idea of the nature of their labours. From the First Section, Lord Brougham and Mr. Leone Levi brought up the report on Judicial Statistics; and the Right Hon. Joseph Napier reported resolutions on the subject of the Transfers of Real Property. From the Second Section, Dr. McWilliam brought up the report on Sanitary Statistics, given in French by Dr. Berg. Sir Roderick Murchison reported the resolutions adopted by the Third Section on the Statistics of Agriculture, and of Mines and Metallurgical Industry. From the Fourth Section, Mr. Newmarch reported on the Statistics of Prices and Wages, and the Rev. Professor Rogers on the Statistics of Banks; M. Legoyt kindly presented a French version of the resolutions. Mr. Hendriks brought up from the Fifth Section the report on the Census and on the Occupations of the People, Sir R. Bromley on Naval Statistics, Mr. Hodge on Military Statistics, and Dr. Balfour on the Vital Statistics of the Army; Dr. Boudin reported in French upon the last subject, and M. Legoyt upon all the others. From the Sixth Section, Mr. Monckton Milnes, M.P., reported on the Statistics of Literature, Dr. Guy on Statistical Methods and Signs, and Mr. J. Heywood on Statistical Units; on the last subject, M. Corr Vander Maeren, of Brussels, was the reporter in French. The Second Section (Sanitary) and the Sixth were most numerous attended.

On the 21st July, after the conclusion of the reports from the Sections, Baron Cœzrnig, referring to Dr. Farr's words at Vienna, said that he had told them the truth, but not the whole truth, for they had found more than a cordial welcome—they had been received as brothers; a national interest had been felt in their proceedings, and an almost familiar reception had been accorded to them in the highest society in England. He then invited the meeting to offer the expression of its gratitude to the Prince Consort for his inaugural address, to Her Majesty's Government, and to Lord

Brougham and the other Presidents of Sections. The proposition was seconded by Dr. Wernadski, who adverted to the fact that Russia had furnished a larger contingent of foreign members than any other state. The Right Hon. W. Cowper returned thanks on the part of the Government, and expressed their great satisfaction in having had the honour of receiving the distinguished representatives of so many countries.

M. Quetelet, in a speech full of kindly sentiments, then proposed a vote of thanks to the Organization Commission and Executive Officers of the Congress, and Lord Ebrington gracefully acknowledged the compliment. M. Legoyt, in the name of the foreign delegates, expressed in eloquent language their sense of the kindness and hospitality they had experienced during their stay in England.

Before the close of the meeting, Mr. Cowper stated, amidst general applause, that he believed it would be agreeable to the members of the Congress if their next meeting were held at Berlin, a capital so renowned for its cultivation and appreciation of science. Dr. Engel and Professor Schubert, the Prussian delegates, replied that although they had not been instructed to invite the Congress, they entertained no doubt that the Prussian Government and the city of Berlin would do their utmost to give the Congress a friendly reception. The proceedings of the Fourth Session of the International Statistical Congress were then brought to a close.

I have thus briefly described the *business* of the week, but it is impossible to close this imperfect report without noticing the hospitalities and attentions which were received by our distinguished visitors. The social features of the Congress are not amongst the least efficacious of its means of promoting the cause of statistical science. At these réunions, the intercourse of men of high attainments and enlightened minds, who are thus afforded an opportunity of cultivating friendly relations, cannot fail to be advantageous to the maintenance of peace and good-will among the nations, as well as favourable to the march of social improvement. This intercourse was promoted by a pleasing succession of hospitable attentions. His Royal Highness the Prince Consort, in the absence of the Queen, received the foreign and colonial delegates at Buckingham Palace. They were invited to the Mansion House by the Lord Mayor to meet Her Majesty's Ministers; and this Society, in conjunction with the Institute of Actuaries and the Actuaries Club, entertained them at a banquet at which nearly 200 persons were present, under the able presidency of Colonel Sykes. Of the hospitality of a more private character, mention must be made of the kind receptions given to them by Viscountess Palmerston, Mrs. Milner Gibson,

Mrs. Sidney Herbert, Miss Coutts, Mr. James Heywood, and the Treasurer of St. Bartholomew's Hospital; and of their entertainment by Lord Ebrington, Miss Florence Nightingale, Mr. Henry Bohn, Mr. Valpy, Mr. Hodge, and others. A public *déjeuner* at the Crystal Palace, when Earl Stanhope occupied the chair, supported by about one hundred and fifty members, brought these social proceedings to a graceful termination.

Although the number of members attending the Congress is not a criterion of its success, the fact that the attendance was larger than at any former meeting is encouraging. Nearly six hundred members inscribed their names as actually present during some part of the proceedings, and of this number ninety were foreigners—thus maintaining the international character of the assembly. That the discussions in the Sections were as earnest, and the solutions of the different questions as satisfactory, as upon any previous occasion, was admitted on all hands; and not only those to whom the inherent difficulties of the undertaking are well known, but other competent judges have pronounced the meeting an undoubted success.

It is not too much to say that the credit of the Government and the country were involved in the result. That the Congress, like all other human institutions, was by no means free from imperfections, those entrusted with the conduct of the arrangements were ready to admit. But on the whole it unquestionably attained a large measure of success; and this result was due to various instrumentalities, and to the co-operation of many intelligent men of this and other countries.

For the cordial reception given to the Congress by Her Majesty's Government, no less than for his personal courtesy to the official delegates, the members could not but feel their obligation to Lord Palmerston, whose enlightened mind appreciated the objects of the meeting and the advantages likely to arise from its being held in this country under the auspices of the Government. In like manner the President of the Board of Trade, Mr. Milner Gibson, rendered all the assistance in his power at every stage of the proceedings. Nor should the valuable assistance rendered by Mr. Cowper, both as a member of the Government and in many other ways, be allowed to pass unnoticed. From the first, when filling the office of Vice-President of the Board of Trade, that right honourable gentleman entered warmly into the proposal that the Fourth Session of the Congress should be held in London, and it was at his instance that Her Majesty's Government were induced to send the invitation to Vienna. As Vice-President of the Organization Commission, and Chairman of the Executive Committee, he gave his personal attention to the details of the business, notwithstanding the exacting demands of his parliamentary and official duties, and to the present

time he has continued to take the most active interest in all the concerns of the Congress.

Where all were animated with the same good-will and desire to be useful, it may seem invidious to make special mention of the assistance rendered by particular delegates: but the services of Baron Czoernig, M. Quetelet, Dr. Engel, Dr. Berg, M. Visschers, and M. Legoyt, should not be passed over in silence. M. Legoyt, besides offering many excellent suggestions on the preparation of the programme (amongst others, that military and naval statistics should be included in it), undertook a great deal of hard work during the busy week of the Congress. He prepared and submitted to the general meeting able reports on *two* of the Sections, and on several occasions was the eloquent exponent of the sentiments of the foreign delegates. Nor did his valuable assistance terminate with the meeting; he has since bestowed no small amount of labour upon the revision of the portion of the General Report of the Congress in the French language—a self-imposed task which the editor, Dr. Farr, cannot fail to appreciate.

That our valued Honorary Secretary, Dr. Guy, should have displayed his accustomed energy and peculiar talent for organization upon this occasion is precisely what might have been expected. His courteous attentions, with which the foreign members especially were so charmed, and his signal services at every stage of the proceedings, were conspicuous to all; and if any proof were wanting of his zeal, might we not point to the extremely interesting memorial of the meeting now before us,* and which I rejoice to learn has become the property of the Society, so that it will continue to adorn this room. You have already heard that through his good offices, the Committee, in their hour of need, obtained the advantage of excellent accommodation at King's College, where, as Mr. Cowper truly observed in publicly thanking the authorities of that institution "Dr. Guy seemed to be almost ubiquitous, for whenever anything "was wanted Dr. Guy was there, and whenever he was there, every- "thing went smoothly and harmoniously."

Upon the services of Mr. Valpy, as one of the General Secretaries, it is unnecessary for me to dwell. From his position at the Board of Trade, it fell to his lot to perform very responsible duties connected with the organization of the Congress; and his exertions were indefatigable to promote its efficiency and success.

As to the share in the arrangements and proceedings taken by another member of the executive, who is completely identified with the Congress—the mainspring, indeed, of the whole machine—I

* Referring to a collection of photographic portraits of the principal members of the Congress.

know that I should best consult his wishes by remaining silent. But I must be permitted to observe that if any advantages to statistical science in this country, any results beneficial to the well-being of society, any better appreciation of our work and character by our distinguished visitors, should flow from the late gathering in this metropolis, they will be due to the persevering energy, arduous labours, and admirable sagacity of our esteemed Treasurer, Dr. Farr.

With a supply of materials somewhat embarrassing from its abundance, I have condensed my report as much as possible, in order to afford time this evening for an ample discussion of the subject. The order of procedure at the late Session followed, with little variation, that adopted at the previous meetings; but it is by no means certain that greater efficiency in future might not be attained by some judicious changes in the arrangements. An opportunity for discussing the practical details now presents itself, and any useful suggestions which may be offered will doubtless be considered before the anticipated meeting at Berlin. I am sure the desire of the staunchest adherents of the Congress would be rather to provoke criticism than to discourage it. There may be a high appreciation of its design and labours, without unqualified eulogy.

By the press the notices of the Congress have been for the most part confined to a description of the proceedings. The only important exceptions of which I am aware, are articles which have appeared in the *Journal des Economistes*, Paris, from the pen of M. Legoyt, and in the *Economist*, London newspaper, under the signature "N.," reprinted in the *Statistical Journal* for September last. The critical observations in these articles are offered in a friendly spirit, and it may be useful just to mention the principal heads. M. Legoyt says, that the programme, like those of Paris and Vienna, was not prepared, in a sufficient degree, from an international point of view; that it reproduced matters already treated at previous Sessions; that the subjects embraced in it were too extensive, and that the Sections were consequently too numerous. He considers the lateness of the distribution of the programme a serious obstacle to its profitable discussion, although he frankly owns that the same fault was committed in Paris. He remarks on the adoption of the reports from the Sections almost without discussion, and suggests that the delegates should examine each evening the propositions submitted during the day, and take measures for securing their final adoption or rejection by the Congress. M. Legoyt further recommends that the publication of the General Report should be immediate, that it should include a full account of the proceedings in the Sections, and that before the close of each future meeting, a Committee of Delegates should be formed to communicate with

the different Governments and to use all its influence to procure the application of the decisions of the Congress.

The writer in the *Economist*, whose style, apart from his initial "N.," we shall have no difficulty in recognizing as that of an important officer of this Society,* while highly approving of the "sectional principle," in conjunction with a carefully prepared programme presenting to each Section, in a comprehensive form, the questions referred to it, considers that the decisions of the Sections, instead of being submitted to the general body of the members for adoption or rejection, should be final. He objects to the reception of the reports of the delegates on the progress of statistical inquiry in their respective countries, as wasting time; and I am sorry for this, because I look upon these brief statements made by the delegates in the general assembly before the reports from the Sections are ready, as instructive and valuable in many respects, and I have occupied the time of the Society in noticing them in the earlier part of this paper. Another defect, in his opinion, "is the offensive frequency of mutual compliments." Lastly, he points out the grave disadvantages resulting from the organization being practically dissolved during the intervals between the meetings of the Congress, and proposes the establishment of a permanent Central Committee at Brussels or elsewhere.

I do not say that these criticisms are in every respect unjust; they deserve consideration; but I confidently believe that in its results the Fourth Session of the International Statistical Congress will fulfil the aspiration of His Royal Highness the President, expressed in these words:—"Happy and proud indeed should I feel if this noble gathering should be enabled to lay the solid foundation of an edifice, necessary slow of construction, and requiring for generations to come laborious and persevering exertion; intended as it is for the promotion of human happiness by leading to the discovery of those eternal laws upon which that universal happiness is dependent."

* During the discussion which followed the reading of this paper, Mr. Newmarch avowed himself as the writer of the articles referred to—(J. T. H.)

ON EDUCATIONAL HELP FROM GOVERNMENT FOR THE DESTITUTE AND
NEGLECTED CHILDREN OF GREAT BRITAIN. By MISS CARPENTER.

[Read before Section (F), of the British Association for the Advancement of Science,
at Oxford, 2nd July, 1860.]

THE Educational Movement is but of comparatively recent date in our country, though no subject now engrosses a larger share of public attention; on none, however, is there a greater diversity of opinion, or more need of reverting to general principles.

Forty years ago great efforts were necessary to prove the importance, now so universally recognized, of extending the inestimable boon of mental culture, and the acquirement of useful knowledge, to the children of the labouring population of England, and of placing a sound education within their reach. At present, unwearied efforts are made throughout the kingdom to promote this most important object, by Christian effort, by enlightened zeal, and by the Government of our country; and yet the very success they have had, has been the means of leaving in greater darkness one portion of the population—the “Neglected and Destitute Children” of Great Britain.

But though “Popular Education” is somewhat a new term, the old endowed Charity Schools prove that the importance of giving education to the very poorest, received the attention even of royalty, as long ago as our sixth Edward; and though the schools founded by him, and others of a similar kind, have been for some time employed by a much higher class than those for whom they were *originally* intended, yet the record remains that the effort was *formerly* made to teach the very lowest of the population—and to educate them.

The attempt to teach those who are too deeply sunk in ignorance, and too little cultivated even to *desire* instruction, will always originate with persons who are actuated by Christian principle and benevolence, and must always be adapted to the peculiar wants of the individuals to be operated upon. Thus Raikes led the way with the Sunday Schools (commenced in 1781), which at first were merely collections of the wild, untaught children of the streets. Near the commencement of the present century, Bell and Lancaster established their schools for the *gratuitous* admission of the very poorest classes. These efforts to influence the very lowest of the population, gradually had the effect of raising the children who were the subjects of them, and the schools rose also, until the very class of children for whom they were originally intended were left behind.

The Sunday Schools once contained the very sweepings of the streets—the children for whose souls none had before seemed to care; the first Lancasterian and Bell Schools gathered in and gave a gratuitous education to any ragged, shoeless children who would come. But the Sunday Schools are now filled with well-dressed children, who would despise such clothing as it was formerly esteemed a privilege to obtain, to appear tolerably neat on the Sabbath; the four thousand boys and girls whose voices filled the Crystal Palace a few weeks since, would be no fitting companions for the wretched outcasts who frequent the back streets and alleys of crowded cities. The excellent National and British Schools, which have risen on the foundations laid by their humble predecessors, and which often afford an education and discipline superior to the schools for the middle classes, are no longer adapted to the children for whom they were originally designed, nor would the teachers be willing to admit children who are evidently unfit associates for their own scholars. As wide a gulf exists as formerly between the *regular* working classes and that large mass below them who may not be either *absolutely criminal or paupers*, but whose means are precarious, whose mode of living irregular, and whose children may be properly designated “destitute and neglected.”

The existence of this large class of uneducated children was forcibly laid before the public at the Educational Conference of June, 1857, by their President, H.R.H. the Prince Consort. “We are told,” he says, “that the total population of England and Wales of children between the ages of 3 and 15 being estimated at 4,908,690, only 2,046,848 attend school at all, whilst 2,861,848 receive no instruction whatever.” Again, he continues, “carefully collected statistics reveal to us the fact that, while almost 600,000 children between 3 and 15 are absent from school, but known to be employed, no less than 2,200,000 are not at school, whose absence cannot be traced to any ascertained employment or other legitimate cause.”

The results of this neglected and uneducated condition are shown in the *pauperism* and *crime* of our country. The Inspectors of Union Workhouses can bear most forcible and painful testimony to the state of degradation and ignorance of most of the children who are brought there, and those who have much practical acquaintance with such institutions know well how many of the inmates have there been maintained from childhood by the country, and then have even reared families to become hereditary paupers. Those of Her Majesty’s Inspectors know well the existence of a large class of the juvenile population who are untouched by the ordinary educational establishments, and who ought for the benefit of society to be educated. We will not quote the statistics of goals to show

that the criminal portion of the community generally springs from this uneducated mass of the people, because the existing want of power to prove previous convictions, renders it impossible to obtain any reliable statistics of the number of criminals who have never had any available education, previous instruction in gaols being generally concealed by prisoners; but the *fact* is appalling that in only nine months, ending September, 1856, 19,336 persons were apprehended in the town of Liverpool, and that of these only 3 per cent. could read and write well enough for any useful purpose; it is also a matter of painful significance that returns from all the Reformatory Schools in England, made at that Conference, proved that of all the children committed to them, more than half were in a state of gross ignorance on admission, and that an average of not more than one-fourth of the children could read the Testament, while in some schools not one-fifteenth had sufficient knowledge to do so.

The discussions of that Educational Conference were not directed to the condition of the millions totally uneducated, but to the "early age at which children are taken from school," and the "insufficient attendance of the children of the working classes." But the concluding remarks of the royal President have a higher and deeper significance. "It is man's duty," said he, "to fulfil his mission to the utmost of his power; *but it is our duty,—the duty of those whom Providence has removed from this awful struggle and placed beyond this fearful danger,—manfully, unceasingly, and untiringly to aid, by advice, assistance, and example, the great bulk of the people, who without such aid, must almost inevitably succumb to the difficulty of their task.*"*

Now if this "great bulk of the people" were educated, if the millions who must without help sink to a grovelling condition, are "untiringly, unceasingly," aided to rise, especially by *the proper training of their children*, we may feel assured, as expressed by Lord John Russell at Sheffield, in 1857, that pauperism and crime would greatly decrease. "I believe," said he, "*that if these wants are supplied, although we can never hope in our most sanguine expectations that temptations will not divert many from an honest and religious course, yet that the number of those who are sent to prison, who not having originally vicious inclinations, have been perverted by bad example and the circumstances of their position,—that the number of those who are criminally punished will very sensibly decrease, and society be a great gainer thereby.*"

The Government of our country has long admitted the importance of assisting in popular Education by the annual Parliamentary Grant

* "Report of the Educational Conference," p. 371.

for the purpose. Its advantages are restricted only to those who support themselves by manual labour, and the admirable condition of many of the schools aided by the Council on Education, together with the general stimulus given to the education of the working classes throughout the kingdom, bear witness to the success of its operations. But this very rise of the intellectual status, only makes these schools more inapplicable to the children who want *also civilizing, moral training, and instruction in the means of gaining an honest livelihood*. As already shown, voluntary benevolence and Christian zeal must *lead the way*, go to the highways and bye-ways of life, search out the neglected and forgotten, draw them with the cords of a man, and compel them to come in ragged, dirty, and miserable as they are, believing that they have a noble mission to be performed on earth, and knowing that they too have immortal souls, and that it is not the will of our Father in Heaven that one of these little ones should perish. By the light of Christianity *only*, by the philanthropic zeal kindled by it, have these dark places been penetrated, which exist in our land. The Ragged and Industrial School movement has done this work. It has reached the very lowest of the population, and wherever it has been efficiently carried out and well supported, has done its work by acting on the part of the population which is untouched by ordinary Pay Schools, and greatly diminishing pauperism and crime. The truth of the principle of these schools has been now absolutely demonstrated. In Aberdeen, where the system was most efficiently carried out by Sheriff Watson, the results were as follows:—In 1841 there were *apprehended* in the county of Aberdeen 328 juvenile vagrants, and *committed to prison* 61 children under the age of 12. The number of vagrant children did not diminish until, on the 19th of May, 1845, 75, of whom only four could read, were, by order of the magistrates, collected by the police and brought to the Industrial School, with the admonition that they might return or not as they pleased, but that begging would not be tolerated. There was a sudden diminution of juvenile vagrancy, until in 1849 and 1850 only three were apprehended, and the Rural Police Committee, in their report for 1846, speak of the *almost complete disappearance* of juvenile vagrants from the county; the gaol statistics show that juvenile criminals under 12 have been reduced from 63 in 1841 to 16 in 1849, and the County Prison Board report, "we would, therefore, recommend the establishment of such Schools and *their support at the public expense.*" A similar diminution of juvenile crime followed the establishment of good Industrial Feeding Schools in Edinburgh and elsewhere. Now in those schools, and those contemplated by the Industrial Schools Act in 1857, the children are kept the whole day, fed, and generally clothed, in some cases lodged also; they are really *educated*, besides

receiving a fair amount of useful school teaching, and being taught industrial work. In the simple Ragged School, the children live at home, but at the school receive gratuitous instruction and industrial training. In both, the ragged and miserable condition of the child is no bar to his admission, and hence the name "Ragged" is retained as a distinctive one. But, as stated by the late Joseph Fletcher, in his official report to the Committee of Council on Education in 1848-9, "it is a grievous error to suppose that because the children are ragged the institution should be ragged also. To bring such children together in numbers on this principle, is to do a direct and serious injury to society. The 'sympathy of numbers,' if there be not power to direct it to what is good, does but fortify the wild. It is no mean power which is required to deal with such materials." Ragged Schools then to be good must have a well qualified, and therefore an expensive staff, no school pence aiding in its support, and there must be various appliances not needed in ordinary schools—such as washing apparatus, a playground, &c., together with many connected arrangements to promote economy and industry, involving much philanthropic labour. But the results have been abundantly successful. The London Ragged School Union Report states that in one year out of 13,979 scholars, 1,260 were put out into situations, 460 presented themselves for prizes for having been a whole year with good characters in their situations; and there were no fewer than 10,117 depositors in the Penny Bank, who have paid in 3,439*l.*,—these all being children who would otherwise have received no education. In London it may be difficult absolutely to trace the diminution of juvenile crime to the Ragged Schools, but Mr. M. D. Hill, in his recent work on "The Repression of Crime," states that while in the Schools of the Bristol Ragged School Union, there were twenty-six imprisonments of children attending them in 1849, during the last five years there have been together only three. A corresponding decrease of juvenile crime is shown by police reports in 1847, the year of the commencement of Ragged Schools in Bristol, and the five years preceding the annual average of juvenile commitments in the city had been about 200, in one year 241, but it gradually sank in subsequent years to 80, and remains less than half in number to what it was previously. This great diminution is attributed by the authorities to the reformatory action which has been exercised by these and similar schools. These are brief illustrations of the effect of this movement. It must then be evident that it is for the benefit of society that these schools should be *effectively* carried on, and it is also certain that though the London Ragged Schools and some others prefer remaining independent of Government aid and inspection, and carrying on their schools by voluntary effort only, sustained as it is there by

illustrious and enlightened persons, yet in most large towns they are either in a low condition from want of teaching power, or are only sustained in an efficient state with extreme difficulty by a few zealous persons. Neither the first condition nor the last can permanently effect the desired end. They require efficient help from the Educational Parliamentary Grant.

The Minutes of the Committee of Council on Education are framed with a view to the ordinary National and British Schools, and for such they provide an admirable teaching power. The last report, just issued, states that during the year 1859 there were inspected 9,555 Day Schools. In these there were 888,131 children under 6,222 Certified Teachers and 14,176 Pupil Teachers, who performed the duties of Assistant Teachers. There was paid to these by the Council, for augmentation of salaries, 86,328*l.*; to Assistants 6,224*l.*; and to Pupil Teachers 252,550*l.*, *i.e.* above 345,000*l.* to secure a good teaching power to these schools; 750*l.* are also given to encourage the fine arts. But at present there is NO TEACHING POWER given to the Industrial or to the Ragged Schools, except the augmentation in case of a teacher being certified; and from what has been said, it will be evident that an intellectual test can no more prove that a master is qualified for such a school, than it can give him the zeal and devotion necessary to carry it on. The Minute for Ragged and Industrial Schools, aids in providing tools and material for industrial teaching, and in the case of sentenced children, allows 3*s.* a week; but does *not give educational aid to the neglected and destitute children of Great Britain.*

The Educational Parliamentary Grant was made before any special attention was directed to the class of children whom we are considering, and indeed before the improvement of the present Sunday and Day Schools had left so far behind the very lowest, it was made simply for "Public Education in Great Britain," and the object of the Grant is stated to be to promote the education of children belonging to the classes who support themselves by manual labour, a definition of course including *all classes* of the population below what are usually termed the middle classes, except paupers and criminals. But because children are unfortunately thrown on the State for support, they are not less entitled to the blessings of education; and many of the Workhouse Schools being notoriously bad, in 1849, at Sir Robert Peel's advice, 30,000*l.* were voted in the estimates, and have been annually granted since, for the payment of teachers in Workhouse or District Union Schools. The distribution of it was left to the direction of the Committee of Council on Education, who appointed a low test for a certified teacher, justly deeming that there were other qualifications needed than intellectual ones in such a position; these teachers are liberally paid, 60*l.* per

annum being given to a master beside board and lodging, and 48*l.* to a mistress, with the highest certificate.

In 1851 the condition of destitute, uneducated children was taken up by the Legislature, and a Select Committee of the House of Commons was appointed to inquire into the present treatment of criminal and destitute children, &c., and to report the minutes of evidence taken before them to the House. The Committee sat through the Sessions of 1852 and 1853, and reported to the House of Commons in June, 1853. Its labours resulted in the establishment of Reformatories, as recommended in that report, to grapple with the juvenile crime of the country; these were mainly supported by liberal aid from Government, (7*s.* a-week for each child committed).

The Committee report finally, that the "Ragged Schools," "especially the Ragged Industrial Feeding Schools, at present supported "by voluntary subscriptions . . . have produced beneficial effects "on the children of the most *destitute classes* of society inhabiting "large towns; that voluntary contributions *have been found in-adequate* to supply the number of such schools at present required "in the metropolis and other cities and towns; and therefore *they should not be excluded* from the aid of the National Grant, under "the distribution of the Committee of Council for Education,— "great care being necessary in framing the minutes applicable to this "description of schools, so as not to fetter private exertions, or to "exclude men eminently qualified to fill the laborious and difficult "position of teachers, by the requirement of too high an educational "certificate."

This recommendation has not yet been carried out. When it is so we may hope and confidently anticipate, from past experience, a very great and lasting improvement in the juvenile population of our country. Under judicious inspection, and with efficient aid, the Workhouse Schools which were formerly a disgrace to the nation, have become models of excellent training, perhaps nowhere surpassed, wherever guardians have themselves been willing to avail themselves of the Act for establishing *District Industrial Workhouse Schools*. Such may all the Ragged and Industrial Schools become with similar help.

The subject has not yet been brought before the public or before Parliament. When it is understood, it cannot be doubted that justice will be done; that those whose voluntary efforts in the cause of humanity are the greatest will not be left unhelped, that the class of the population who most require instruction will not be left uneducated. The spirit of the benevolent founders of the ancient endowed schools,—of the Raikes, the Bells, the Lancasters,—all of whom desired to carry instruction *to the very lowest in the king-*

dom, is not departed from our nation. In our own times a John Pounds has arisen, and in his humble sphere struck out a new idea, and worked out a new mode of gathering the outcasts together, and making them useful members of the community. The small seed he planted in faith and love, has grown into a goodly tree. The Shaftesburys, the Watsons, the Guthries, and unnumbered bands of Christian labourers have patiently and zealously applied themselves to the work, and discovered how the neglected and destitute may be restored to society; but the field is much too large for voluntary benevolence to occupy fully, or to cultivate effectually. We trust that as for the Criminal and the Pauper Children, the Government of our country will avail itself of the proffered voluntary effort, and will provide efficient help for the children who are "Neglected and Destitute."

Bristol, June 27, 1860.

MEMORANDUM relating to the SYSTEMS of TAXATION at present in force in the UNITED KINGDOM, with especial reference to which DIRECT and INDIRECT MODES of RAISING REVENUE are employed, and the practical effects thence arising. By WILLIAM NEWMARCH, one of the Honorary Secretaries of the Statistical Society, and Editor of its Journal.

[Prepared by request for the Fourth Annual Meeting of the National Association for the promotion of Social Science, to be held at Glasgow, September, 1860.]

(I.)—As regards the leading Facts.

1. The population of the United Kingdom may be assumed to be thirty millions of persons.

2. It is shown by Schedule X annexed, that in 1858 the net Imperial Revenue was 62·2 millions sterling, and the local taxes a further amount of 18 millions sterling; altogether, 80 millions sterling.

3. It is also there shown that 24·6 millions (or 30·0 per cent. of the 80 millions) were in 1858 raised by direct assessments, equal to 6 per cent. per annum on incomes (and in 1860 equal to 8 per cent. on incomes).

4. It is also shown, that 32·1 millions (or 51·7 per cent.) of the 62·2 millions (imperial) are raised by indirect taxes, which in no sense can be justly said to interfere with industry, enterprise, or skill.

5. It is also shown that a further amount (*d*) of 13·6 millions (or 21·9 per cent.) of the 62·2 millions (imperial) is raised by small indirect taxes on articles of general comfort.

6. Out of the 62·2 millions (imperial) it is shown in Schedule X that not more than 9·9 millions can be described as taxes directly interfering with industry, enterprise, or skill.

7. Of this amount of 9·9 millions the sum of 1·5 millions represents the duties on Paper and Hops, already condemned by Parliament, and only awaiting the first surplus revenue to be abolished; and the same statement applies to the 0·9 millions, representing at least half the present duty of 3s. per cent. on fire insurances. These items together amount to 2·4 millions (or 24·3 per cent.) of the 9·9 millions now in question.

Note.—At the Meeting of the National Association for the Promotion of Social Science, held at Bradford, in September, 1859, it was referred to a Sub-Committee to make arrangements for a formal discussion of the subject of Taxation at the meeting to be held in September, 1860. The following Memorandum has arisen out of this proceeding, but is not to be held as being in any sense an official paper issued by the Sub-Committee.

8. The remainder of that sum, viz., 7·5 millions (equal to 12·0 per cent. on the 62·2 millions imperial revenue), includes 4·8 millions produced by numerous duties of assessed taxes and licences rather troublesome than oppressive, and 2·7 millions half the present malt tax of 3s. per bushel, a tax which it is desirable to have reduced but which even at its present rate is not markedly mischievous.

9. It appears that in the New England States, where direct taxation is wholly employed, that in the first place there is a poll tax of say 6s. on each male adult; and, in the second place, that the total direct assessments do not amount to more than say 1 per cent. on incomes; a rate of assessment so small as to render immaterial great inequalities in the modes of levy.

10. It appears also (see statement at foot of X) that at present in many large towns and districts in the United Kingdom, a limit has long since been reached beyond which the levy of direct local taxes cannot be carried.

11. It also appears that in this country, where the direct assessments amount to a large percentage on incomes, the state of the law relating to these assessments becomes necessarily and inevitably, in consequence of the refinements and specialties to be observed, so diffuse, complex, and uncertain, as to amount in itself to a great public evil.

12. As regards the 13·6 millions of indirect taxes (customs) on general comforts—tea, sugar, coffee, &c.,) it is to be remembered, that during the last twenty years the percentage of each of these duties has been progressively reduced from very high rates, to rates which under an ordinary state of things are intended to be, and are (by comparison and actually), very small. Sugar, for example, which used to pay 63s. per cwt., was reduced to a peace rate of 10s. per cwt., or say 1d. per pound; the retail price of the article having also fallen from say 8d. to 4d. per pound.

(II.)—As regards Modes of Taxation.

13. The four cardinal principles of taxation enforced by Adam Smith may be stated shortly, as follows:—

(a.) I. That the persons should contribute in proportion to their respective abilities;

II. That the assessments should be certain in amount, and the liabilities thereto clearly defined;

III. That all taxes should be levied at the time and in the manner most convenient to the payer;

IV. And should take out and keep out of the pocket of the payer the smallest possible sum.

14. Various schemes of taxation have been proposed from time to time. Of these the three principal may be said to be,—

- (b.) That all taxes should be arranged and levied on the principle of assessing every person in proportion to the amount of protection to person and property he receives from the State.
- (c.) That all taxes should be arranged and levied on the principle of taking the largest proportionate payments from those persons who have the largest incomes; and therefore that the rates of annual assessment should be *progressive*, according to the amount of the annual income—being, for example, say 1 per cent. upon incomes of 100*l.* per annum; and say 5 per cent. on incomes of 1,000*l.* per annum.
- (d.) That all taxes should be arranged and levied on the principle of exempting labour and skill, and placing the burden wholly upon *realized property*—for example, the profits and the stock in trade of a merchant or dealer would be passed over, but the realized property of a fundholder or landlord would be assessed.

15. As concerns these theories there are the following among other objections and difficulties, viz. :—

With reference to (b.)—the suggested principle of proportioning taxes to protection—

- (1.) The first result of such a principle must be a *poll tax*, on the ground that at least each man's person is protected by the State.
- (2.) Provisions must be made for dealing practically and arithmetically with such cases as the following, viz., (A) a man who earns 1,000*l.* a-year, spends it, and accumulates nothing; (B) a man who receives 1,000*l.* a-year from various sources, who spends only 100*l.* and saves 900*l.*; (C) a man who consumes at the rate of 1,000*l.* a-year out of a capital of 10,000*l.* previously acquired.

In dealing with these three comparatively simple cases, a practical rule capable of being dealt with by the rude machinery of the tax-gatherer must be framed, stating *accurately* the percentage of the protection tax.

If, for example, the protection be estimated according to what a man *spends*, then, in the first year, B will pay one-tenth as much as A, and will receive *ten* times more protection; and in the second year he will still pay only one-tenth as much as A, and will receive *twenty* times as much protection. On the other hand, C will pay each year ten times as much as B, and in ten years will be a beggar, while B will have amassed a large fortune.

If the protection be estimated according to the amount of *realized property* possessed, then A will have a house and possess premises ten times larger than B, but will pay no tax whatever; while B will pay ten times more than A because he adds nine times more to the accumulated wealth of the country, C will be worse off than A, inasmuch as in ten years, and with the same expenditure,

his income would wholly cease; but during those ten years, while A would pay no taxes whatever, C would have been mulct of a large part of his temporary and expiring revenue.

16. The truth seems to be, that while the State must necessarily rest its just claim to impose taxes on the ground of the general protection it affords to each and all its subjects, it is impossible, *in practice*, to assess upon each person an amount of taxes corresponding *exactly* to the amount of protection he receives.

17. With reference to (c) the suggested principle of—

Progressive assessments, or requiring the largest proportionate payments from those persons who have the largest incomes,

some of the difficulties are these :—

(1.) There is the same injustice in forcibly taking the rich man's means in order to lesson, *pro tanto*, the poor man's share of a reasonable burden of taxes, as there would be in forcibly compelling the poor man's labour in order to increase the rich man's profits. In other words, the suggested principle amounts simply to confiscation.

(2.) The wealth or poverty of individuals is and must be determined by circumstances and accidents with which the State cannot and ought not to interfere by any schemes of artificial compensation or re-adjustment.

(3.) To tax the means of a rich man at a higher rate than the means of a poor man, would be in the most direct form a penalty on prudence and accumulation; and therefore a hindrance of the most formidable nature to the progress of the community in wealth, comfort, and intelligence.

18. With reference to (d) the suggested principle of—

Placing the burden of taxes wholly upon *realized property*, in order to exempt labour and skill,

some of the difficulties are these .—

(1.) Even in this country, rich as it is, a revenue of 80 millions *per annum* could not be raised from the yearly income yielded by realized property except by a percentage of assessment so heavy, that in the immensely preponderating mass of the small incomes, it would amount to oppression of the direct kind.

(2.) On no ground of justice can it be said, that in this country the recipients of income from realized property are bound to pay all the taxes required by the State; and certainly if such a change could be seriously contemplated, notice equal at least to half the length of a generation should be given. The present amount of realized property has, in the main, been fairly earned by the industry and skill of the present or former possessors, and earned under the expectation that no undue amount of taxation would be placed upon property of that description.

(3.) The suggestion of taxing realized property solely, in order to exempt labour and skill, involves the same principle of confiscation which is included in the preceding suggestion of a rate of assessment increasing with the income of the payer of the tax.

(4.) It also involves the same evil of operating as a penalty upon prudence and accumulation:—of granting a bonus to expenditure:—and inflicting a fine on savings.

19. It seems, therefore, that neither of these three hypotheses (*e, f, g,*) will afford any solid assistance; and that on grounds of substantial justice and real practicability we must take as our guides the four rules (*a*) laid down by Adam Smith; these rules amounting in substance to this general doctrine, viz:—

That the total taxes of a State must be kept as small in amount as possible, and that amount must be contributed by *all persons* according to their different abilities, and in the modes most convenient to the payers.

And it may be added, that in an old country like this, where 80 millions of revenue have to be raised from 30 millions of people, an immense majority of whom depend upon wages and profits of trade:—and where, further, in consequence of the almost infinite variety of sources of income—land, houses, public funds, professions, joint-stock companies, commerce, manufactures, mines, ships, inventions, retail trades, &c.,—the “respective abilities” to contribute to taxation are of the most varied description—it would be wholly puerile and impossible to attempt to raise so vast a revenue in accordance with any single rule or by the aid of any single plan.

The circumstances of the people to be taxed, the enormous magnitude of the sum to be raised, and the free genius of the laws to be administered, all compel the employment of principles and machinery distinguished in all their parts by diversity, pliability, and plainness.

(III.) *As regards Practical Results in this Country.*

The following propositions are submitted as arising fairly from the facts and statements herein adduced, viz:—

20. That a very large part of the present imperial revenue of the United Kingdom—a part certainly exceeding one-half—is raised by taxes not open to serious objection on any ground, abstract or practical.

21. That in an old country in which 80 millions sterling of (total) revenue have to be raised from 30 millions of people,—the great mass of whom subsist on wages—*indirect taxation* to a large extent is inevitable, and may be so adjusted as to avoid almost entirely the evils of injustice and oppressiveness.

22. That combining the imperial and local taxation at present raised, the *direct* virtual assessments on income already (in 1860)

amount to 8 *per cent. per annum*, and that practically this mode of levy does not admit of more than trifling extension.

23. That to supersede any large part of the present indirect taxes, in the form of moderate customs' duties on articles of general consumption, would render necessary a heavy poll tax and a direct assessment on some capitalised value of wages and small incomes; both of them forms of taxation in a high degree impossible in this country.

24. That as a general result, it may be affirmed with no small confidence, that the present system of taxation of the United Kingdom is not fairly open to the sweeping censures, and certainly is not susceptible of the extreme and subversive changes which in some quarters have been lately recommended.

SCHEDULE X.—NET IMPERIAL REVENUE, UNITED KINGDOM, 1858.

(I.)—*Taxes below the Line of Interference with Industry, Enterprise, or Skill.*

FIRST (a.)—*Taxes on Extravagance.*

Class.	Net Rev. Mlrs.	Per cent. of Total Imperial Net Revenue.
	£	
Customs—Spirits	2·30	
Tobacco	5·90	
Wine	1·80	
	— 10·00	
Excise — Spirits	9·00	
Malt (<i>half</i>)	2·70	
	— 11·70	
		— 21·70 = 36·5 p. ct.

SECOND (b.)—*Taxes wholly innocuous.*

Customs—Corn (1s.) Duty	0·60	
Excise —Railway Duty	0·40	
Post Office Net Revenue	1·30	
	— 2·80	
		— 2·30 = 3·8 p. ct.

THIRD (c.)—*Taxes on Transfers of Property.*

Stamp Duties on Deeds, Probates, Lega- cies, Bills, Notes, and Land Tax	7·20	
Duty on Fire Insurances (<i>half</i>)	0·90	
	— 8·10	
		— 8·10 = 11·4 p. ct.
		— 32·10 = 51·7 p. ct.

(II.)—Taxes more or less Interfering with Industry, Enterprise, or Skill.

FOURTH (d.)—Moderate Taxes on General Comforts.

Class.	Net Rev. Mlms. £	Per cent. of Total Imperial Net Revenue.
Customs—Tea	5.30	
Sugar	6.00	
Coffee .....	.50	
Other Articles.....	1.80	
	13.60	
		13.60 = 21.9 p. ct.

FIFTH (e.)—Direct Taxes on Income.

Income Tax 6d. per £ = 2½ per cent per annum	6.60	
	6.60	
		6.60 = 10.5 p. ct.
		20.20 = 32.3 p. ct.

SIXTH (f.)—Taxes on Employment and Expenditure.

Assessed Taxes	3.20	
Stamps—Licences .....	.20	
Excise — do.	1.40	
	4.80	

SEVENTH (g.)—Taxes directly interfering with Trade.

Excise—Paper Duties	1.10	
Hop Duties .....	.40	
	1.50	

EIGHTH (h.)—Further similar Taxes.

Half Malt Tax (see a)	2.70	
„ Fire Duty (see c) .....	.90	
	3.60	
		9.90 = 16.0 p. ct.

Total (II) Category	30.10 = 48.3 p. ct.
„ (I) „	32.10 = 51.7 p. ct.
Total Net U. K. Impl. Revenue, 1858	62.20 = 100

(1.) To this total must be added the LOCAL TAXATION of the United Kingdom, amounting to say 18,000,000l. per annum.

(2.) These local taxes may, for the purposes of general argument, be safely described as taxes on income and property. If we assume that house rent may be represented, in general terms, as equal to say one-sixth of the income of the occupier, and that the local taxes are equal to say twenty per cent. per annum on the rent, then 100l. per annum rent pays 20l. per annum local taxes; and that 20l. is equal to 3½ per cent. per annum on the assumed income (of 600l.) of the occupier,—and adding the income tax of 2½ per cent. per annum (as above e.) the total

direct taxes in 1858 would be 6 per cent. per annum on income. In 1860 the income tax is 4½ per cent. per annum, and therefore, on the basis assumed, the direct taxation will be 8 per cent. per annum.

(3.) In Massachusetts, where direct taxation is exclusively employed, the whole amount of State and local taxes does not amount to more than one per cent. per annum on incomes. (See a paper by Dr. Jarvis, Boston, U.S., in *Statistical Journal*, September, 1860). In Massachusetts, and most of the States of the American Union, a poll tax of one and a-half dollars (6s.) a head, on males of 16 and above, is a fundamental part of the fiscal scheme.

(4.) It is stated in the Circular Letter of 18th April, 1859, by Mr. Thwaites, the chairman of the Metropolitan Board of Works, that in the metropolis it has become, in effect, “altogether impracticable to raise by means of direct rates” any further sums for carrying out even the most urgent public works,—and he gives as instances of actual excessive pressure of local rates, in the year 1857—Chelsea, where the rate was 6s. 11d. per pound—Shoreditch, 6s. 8d.—Bermondsey, 6s. 6d.—Horseleydown, 7s. 10d.—and several others.

(5.) As regards the extreme difficulty and complexity which attends the levy and collection of onerous direct taxes, reference may be made to Mr. Coode’s well-known standard Report of 1844 on Local Taxation, in the index of which no less than twenty-five pages of small print are occupied with outline headings under the three subjects of “Property in respect of which the rate is imposed”—“Persons liable to the rate”—and “Valuation of rateable property.”

(6.) The following, we believe, are the only articles on which Customs’ duties are now payable; the last marked e and s being those on which the duties are regulated by the excise or stamp duties on like articles of home produce or manufacture:—

Arrowroot, biscuit, pearled barley, macaroni, sago, and other farinaceous articles, 4½d. per cwt.

Books, prints, and drawings, per cwt. 16s.; under international copyright, 15s.

Cocoa, 1d. per lb.; husks, ½d.; paste and chocolate, 2d.

Coffee, raw, 3d.; roasted, 4d. per lb.

Corks, ready made, 3d. per lb., till March 31, 1862.

Corn, 1s. per quarter; meal and flour, 4½d. per cwt.

Currants, figs, prunes, raisins, 7s. per cwt.

Plums, French or dried, 15s. per cwt.

Cherries (dried), confectionary, preserved fruits, ginger, &c., 2d. per lb., till July 1, 1861.

Hats or bonnets of chip, straw, horsehair, &c., 1s. 3d. per lb., till March 31, 1861.

Pepper, 6d. per lb.

Powder, hair and perfumed, 4½d. per cwt.

Sugar, 12s. 8d. to 18s. 4d.; cane juice, 10s. 4d.; molasses; 5s. per cwt., till July 1, 1861.

Tea, 1s. 6d. per lb., till July 1, 1861.

Tobacco, 3s. per lb.; manufactured or cigars, 9s.; snuff, 6s.

Timber, 1s., sawn wood 2s. the load; furniture wood, 1s. the ton.

Wine, 3s. per gal., till Dec. 31., 1860; afterwards, 1s. to 2s. 11d., according to strength.

e. Ale and beer, 20s. the barrel.

e. Hops, 20s. per cwt., till January 1, 1862; afterwards, 15s.

e. Malt, 26s. per quarter.

e. Chicory, or other vegetable matter for like use, 6s. per cwt.

e. Paper, 16s. per cwt.; paper hangings, 14s.

e. Spirits, foreign, 10s. 5d.; colonial, 10s. 2d. per gal.

e. Vinegar, 3d. per gal.

s. Plate—gold, 17s. per oz.; silver, 1s. 6d. per oz.

s. Cards, playing, 15s. per dozen packs.

s. Dice, 21s. per pair.

The EFFECT of the GOLD SUPPLIES on the FOREIGN EXCHANGES between the UNITED KINGDOM and FOREIGN COUNTRIES, and on the PRICE of SILVER. By FRANCIS JOURDAN.

[Read before the Statistical Society of London, 19th February, 1861.]

IN treating statistically the subject of the Foreign Exchanges, it has generally been considered sufficient to furnish abstracts from the quotations published by those who are engaged in monetary transactions of this nature; but such quotations, though adapted to mercantile operations dependent merely upon arbitrations or international monetary values existing at any one period of time, are inefficient when an essential object, as with all statistical inquiry, is to lay down accurately periodic fluctuations. In bringing before the Society the modifications essential to produce efficient tables of the fluctuations in the foreign exchanges, no claim can be laid to originality, as it will be shown that nearly fifty years ago the late Mr. Ricardo called attention to the necessity of making similar corrections before drawing conclusions from the apparent fluctuations of different periods.

The impossibility of deriving correct results from the simple collection of facts in their ordinarily accessible form, and the consequent necessity of submitting these facts to a corrective process, rendering the inquiry somewhat complicated, it will be as well to explain the causes which give rise to this peculiarity, before laying down the plan here adopted for producing exchange tables in a correct form.

The technical term "rate of exchange," expresses the amount of coin receivable in the money of one country against a *fixed* amount of coin in another country: thus the rate of exchange here upon Paris is at one period 25 francs 10 centimes, at another 25 francs 20 centimes:—meaning that at one time 25·10 at another 25·20 are receivable against 1*l.* of our money. And the currency of France being now virtually based upon gold, the difference between 25·10 and 25·20 is an exact numerical expression of the alteration which has occurred in the exchangeable value of the money of each country. In those cases, however, where the currencies are different, one country adopting *silver* the other *gold* as a legal tender, the *recorded* variations in the rates cease to express the *real* exchange fluctuations:—for it is apparent that if a rise or fall has taken place in the price of *silver*, any fluctuation that has occurred may be partly attributable to this cause:—for instance, if the price of silver advanced

from 5*s.* to 5*s.* 1*d.* per oz., the monies of those countries having a silver currency would become relatively more valuable than ours, and as the rate of exchange expresses the quantity of that silver money exchangeable for our pound sterling, the rate would naturally decline; in other words, supposing for the moment this rise in the price of silver to be the only active influence, the rate of exchange would fall inversely as 5*s.* : 5*s.* 1*d.* indicating that so much less foreign coin of this enhanced value is equivalent to our pound sterling. It is, therefore, necessary to consider the fluctuations recorded upon places adopting a *silver* currency as consisting of two parts,—the first part being incidental to any alteration that may have occurred in the *relative values* of gold and silver; the remainder, or second part, expressing the real fluctuation, or that which properly concerns a variation in the rate of exchange. Therefore to obtain a correct statement of rates dependent upon both metals, it is necessary when any variation has taken place in their relative value, to eliminate so much of the recorded fluctuations as arise from this cause. The result will then represent the extent of any *real* fluctuation in the exchange, or such as may be said to have its origin in the operations of trade.

Want of attention to another point of minor importance, renders most of the tables hitherto compiled incomplete, these tables giving, in some instances, the rates current for Bills payable *on demand* or three days' sight, and in other cases at three months date; but to express correctly periodic fluctuations, the quotations ought, in all instances, to be for bills payable at the *shorter periods*, the variations in the rate of discount causing apparent fluctuations when no real alteration has taken place; no better illustration can be given of the necessity of attention to these points than a reference to an elaborate return to Parliament by the Bank of England, which contains the rates for bills upon Amsterdam, Hamburg, and Paris, for a series of years. Now these rates are given for Amsterdam and Hamburg at three months' date, and for Paris at three days' sight, and being simple extracts from the published courses of exchange, of course make no allowance for the varying price of silver; for instance, we find Hamburg quoted 13·11½ (marks and schillings per pound sterling), in April, 1852, and in November of the same year 13·7, and upon Amsterdam at the same periods, the quotations are respectively 12·2 and 11·18 (guilders and stivers per pound sterling), showing apparently a heavy fall in both instances; but as silver had advanced in a greater proportion during the same period, viz. from 5*s.* to 5*s.* 1½*d.*, the rates at the latter period were virtually rather higher, though apparently much lower.*

* The rates given in this return (220 I., Sess. 2) would lead to the supposition that the exchanges on *Amsterdam* and *Hamburg* had fallen fully 1½ per cent. in

It will, doubtless, be perceived that this apparent anomaly arises from the currencies of Hamburg and Holland being based upon *silver*; but, in further illustration of the subject, it may be as well to refer to some observations made by Ricardo, in which he says with regard to a set of tables prepared about the commencement of the century—"The accuracy of these tables must be admitted or proved before the conclusions which result from the inspection of them can command assent, but so far from this being the case, their accuracy is disowned by Mr. Mushet (the author) himself, who acknowledges the false principle upon which his first tables were calculated, and accompanies the second edition of his pamphlet with the following notice:—

"I have also corrected this mistake of considering the par to be fixed, because gold being the standard of the money in England, and silver in Hamburg, there can be no fixed par between those two countries; it will be subject to all the variations which take place in the relative value of gold and silver—To find the real par therefore, we must ascertain what was the *relative value of gold and silver when the par was fixed*, and what is the relative value at the time we wish to calculate it. As it is universally admitted that gold is the standard measure of value in this country, and that silver performs the same office in Hamburg, it is evident that no tables can be correct which assume a fixed invariable par, the true par must vary with every variation in the relative value of the two metals." Mr. Ricardo goes on to make another objection to these tables, and says again, "The degree in which the exchange is above or below par, is calculated by a reference to the prices quoted from Lloyd's list. Now invariably have these prices been for bills at two and a-half months, and as the par of exchange is computed from a comparison of the actual value of the coins of the two countries, payable at the same time in both, and not in one of them at the end of two and a-half months, an allowance for interest must be made for this period."

From this, it appears that Mr. Ricardo objects to the tables he refers to, because, in the first instance, they were prepared without reference to the varying price of silver, and when this error was perceived, the quotations given were always those at two and a-half months date, which may, and frequently do, vary, owing to alterations in the rate of discount, while the rate for bills on demand remains the same.

In comparing, therefore, periodic rates between this and other countries, the most important element is the metal which forms the seven months, but as *silver* had risen in the mean time as much as 2 per cent. in London, it is clear that the decline in the rates is more than accounted for by this alteration in the price of silver alone.

legal tender for the time being, in the respective countries;—for instance, France and the United States have now *Gold* currencies, while those of Holland, Hamburg, and India are based upon *Silver*. For the purpose of ascertaining our Par of Exchange with countries having a Gold standard, it is simply necessary to compare the quantity of fine gold in the foreign coin with the quantity in our "sovereign," and if the rate of exchange stands at such a point as to show that less fine gold is receivable abroad than is paid here through the operation of purchasing a bill upon that foreign country, the rate is said to be below par, and the probability of an export of bullion varies with the extent of the decline below this par.

In illustration of this, the 20-franc piece, the present virtual legal tender in France, contains 89.617 grains of pure gold, or one franc contains 4.4808 grains; and our sovereign having 113 grains of pure gold, it follows that there are about the same number of fine gold grains in 25 francs, 20 centimes, as in 1*l.* sterling, in other words the fixed par between London and Paris is about 25.20. Now if the rate of exchange here, upon Paris, is quoted below that point, it indicates that less than 25.20 are obtainable for every 1*l.* sterling, and the rate is then said to be below par.

Our par of exchange with those countries where *Silver* alone is admitted as a legal payment is not a similar fixed quantity, but fluctuates with the price of silver;—thus there are 165 grains of pure silver in a rupee; at 5*s.* per oz. for standard silver, this would be equivalent to about 1*s.* 10¼*d.* of our money, but at 5*s.* 2*d.* per oz. it would be equivalent to 1*s.* 11*d.*, consequently the par of exchange ranges under these conditions from 1*s.* 10¼*d.* to 1*s.* 11*d.*, showing that when silver is 5*s.* per oz., it may answer to export it to India if the rate for bills is 1*s.* 11¼*d.*, but it would not answer to do so if silver were 5*s.* 2*d.* per oz.

Consequently to ascertain the real fluctuations in the case of those countries which possess a *gold* standard, we have merely to note the simple rise and fall;—but to make a fair comparison of the periodic fluctuations in our rates upon countries with a *silver* standard, it is necessary to adjust these fluctuations in accordance with the varying price of silver. It may be as well to add that no allowance is here made for the percentage charged by different governments for converting the raw metal into coin, which occasionally affects slightly the profit on export, but of course has no influence on the main object now in view of obtaining the real fluctuations.

Out of the five places now under review, in two of them, namely, *France* and *America*, which have *gold* currencies, we attain, therefore, correct results by merely recording the quoted rates for bills payable on demand. The other three, *Amsterdam*, *Hamburg*, and

India, with silver currencies it is proposed to adjust so as to do away with the disturbing influence caused by variations in the relative value of gold and silver, and to give an estimate of the real fluctuations which it may be assumed would have arisen had the price of silver here remained unaltered, the mode adopted to attain this end is to fix this price at, say, 5s. 2d. per oz., and having ascertained the percentage of difference between the price of silver during any given period, and this fixed rate of 5s. 2d. per oz., by altering the quoted rates in the same proportion, we attain a correct view of the real fluctuations that would have occurred during the same period had the price of silver been constantly 5s. 2d. per oz.

This will, perhaps, be made clearer by a reference to the formula on which the adjustment is actually based $x = \frac{R \cdot a}{S}$ the symbol a representing the average price of silver for any given period, R the quoted rate of exchange during the same time, S the fixed price of 5s. 2d. for silver as now proposed. R expressing the amount of foreign silver coin given in exchange for our sovereign, must always rise as a , the average price of silver falls, and *vice versa*, a succession of these equations will therefore distinguish the fluctuations which are independent of the value of silver.

In the following table the annual quoted rates for these three places are calculated on the basis of 5s. 2d. per oz., and are given in parallel columns under the head of *computed comparative rates*.

TABLE A.

Years.	Amsterdam.		Hamburg.		Paris.	India.		New York.	Average Price of Silver per oz.
	Quoted Rates.	Computed Comparative Rates.	Quoted Rates.	Computed Comparative Rates.	Quoted Rates.	Quoted Rates.	Computed Comparative Rates.	Quoted Rates.	
	Glds. Stiv.	Glds. Cts.	Mks. sgs.	Mks. cts.	Frs. cts.	s. d.	Rps. cts.	Dls. cts.	s. d.
1852....	11 18·68	11·652	13 7·00	13·120	25·280	2 0·19	9·688	4·8466	5 0·53
'53....	11 16·12	11·713	13 4·02	13·147	25·017	2 0·59	9·684	4·8927	5 1·31
1854....	11 14·48	11·630	13 2·68	13·063	24·994	1 11·55	10·111	4·8890	5 1·56
'55....	11 16·96	11·723	13 4·65	13·151	25·149	2 0·74	9·600	4·9000	5 1·36
1856....	11 16·64	11·713	13 5·04	13·181	25·289	2 0·20	9·817	4·9031	5 1·37
'57....	11 15·96	11·757	13 4·23	13·218	25·230	2 0·69	9·688	4·8729	5 1·78
1858....	11 14·88	11·632	13 5·10	13·193	25·090	2 0·39	9·748	4·8971	5 1·41
'59....	11 13·78	11·695	13 3·18	13·207	25·089	2 0·49	9·807	4·9064	5 2·08

Thus the average quoted rate for Amsterdam in 1852, was 11·18·68 (guilders and stivers), or 11·934 guilders and cents. per pound sterling, and the price of silver 5s. 0·535d., the difference

between which and 5·2 being 2·36 per cent., the quotation of 11·934 for 1852, is consequently reduced 2·36 per cent., and the result 11·652 in the second column, is a correct estimate of the rate upon Holland, had silver been worth 5·2 in 1852. The Hamburg annual average rates of exchange are treated in a similar manner. With regard to India, that country having absorbed a very large quantity of silver during the last ten years, and the flow having been chiefly from hence, it is natural to expect that the rates of exchange should have been much influenced by the transmission of this bullion; it is accordingly found, that the exchanges upon India have indicated a great demand for remittances, the price charged for bills having frequently been sufficiently over the intrinsic value of the rupee as to cover the expenses of transmitting specie, including insurance and loss of interest during transit; these expenses forming of course the natural limits which the fluctuations in the rate of exchange between any two countries can never permanently exceed. A considerable portion of this silver has come from France, where, owing to the existence of a double standard, the fall in the value of gold compared with silver, has rendered the former metal the more advantageous tender in payment, and gold has extensively replaced the silver coin taken for export to the East.

Before the Indian mutiny, when income and expenditure were more happily balanced than at present, the East India Company had to draw Bills upon the Presidencies against disbursements made in this country, and the rates charged were a fair index of the demand for remittances; and although these drafts were issued at 60 days' sight, they may be more fairly considered as representing the short exchange, the preference given to the Company's paper enabling them to obtain an exceptional rate amounting to about one farthing per rupee above what first-class commercial bills could be obtained at.* Since the mutiny, however, instead of having to receive money from India, large sums representing the excess of expenditure beyond the requisite disbursements here, have had to be remitted by Government; and although rates are still advertised at which drafts are issued, the rates are fixed so high as virtually to exclude remitters, the insignificant amounts actually drawn being merely obtained by parties not sufficiently conversant with exchange operations to prevent them from incurring unnecessary loss. The rates since 1857 are therefore derived from the quotations for first-class bills, and the annual averages are computed in the parallel column on the basis of

* The quotations given for India from 1852 to 1856 inclusive, are those charged by the East India Company upon Bengal, except during a portion of 1855, when the rate was raised so high that the Company were virtually out of the market as drawers of bills.

5·2 per oz., in accordance with the principle adopted for the other countries with silver currencies.

The last column gives the rate in New York for bills at sight upon London. In consequence of the exchange operations with America being almost exclusively conducted on the other side of the Atlantic, any attempt to give the rate *here* upon New York could only have been an estimate derived from the rates quoted there upon London; and as there could be little, if any, advantage in this, our object being chiefly to ascertain comparative rates, the quotations given are those derived from New York. The par of exchange, owing to both countries having a gold currency, is easily ascertained,—the number of grains fine in the eagle of ten dollars is 232, and the grains in our sovereign being 113, it follows that about dollars 4·87 are equal to our pound sterling, which is nearly equivalent to 109½, according to the mode adopted in America of estimating the exchange at a fluctuating percentage on the nominal value of 4s. 6d. per dollar.

Recapitulating the chief heads of the inquiry up to the present point, it will be perceived that the mode adopted in the collation of these tables, and which might be extended to future statistics on the same subject, is *firstly*, to ascertain in all cases the rates for *short* bills, these quotations sufficing for countries with *gold* currencies, such as France and the United States, but which, if adopted without modification for places having *silver* currencies, are shown to be misleading; and to obviate this it is proposed, in those cases where the currency is based upon silver, to give, in addition to the current quotations, *computed* rates, which being estimated on a *fixed basis* are such as it may fairly be concluded would have existed had silver not varied from the price of 5s. 2d. per oz., in other words, adopting a fixed par, and enabling the *real* fluctuations, or those dependent on the course of trade, to be distinguished from the *apparent* fluctuations or those derived from the usual price currents.

A further alteration, though one of mere detail, provides that the Indian and American rates shall be stated in *rupees* and *dollars* per pound sterling, instead of *shillings* and *pence* per rupee or dollar; one advantage of this alteration is, that the *higher* quotations upon these places then correspond as in the case of Amsterdam, Hamburg, and Paris, with what are called *favourable* rates, and *vice versa*, and enables the fluctuations to be more clearly set forth by putting them in the following form—

TABLE B.

Years.	Ratio of Fluctuation in the Foreign Rates of Exchange.						Average Bullion in Bank of Eng- land.	Average Discount (Bank of England Rate).
	Amster- dam.	Ham- burg.	Paris.	India.	New York.	Totals.		
1852.....	997	997	1006	992	991	4983	Mlns. 20·7	Pr. cnt. 2½
'53.....	1002	999	995	991	1001	4988	17·4	3¾
1854.....	995	993	994	1035	1000	5017	13·9	5½
'55.....	1003	999	1000	983	1002	4987	14·3	4¾
1856.....	1002	1002	1006	1005	1003	5018	11·2	5¾
'57.....	1006	1004	1004	992	997	5003	10·1	6¾
1858.....	995	1002	998	998	1002	4995	17·7	3½
'59.....	1000	1003	998	1004	1004	5009	17·9	2½

Note.—Table B is constructed as follows:—The number 1000 stands in each case for the *mean* or *average* rate of the eight years 1852-59. Upon *Amsterdam*, for example, the mean of the quotations set forth in Table A, col. 2, is 11·690, consequently this stands for 1000 in Table B, and the rate in the same column for 1852, which is 11·652, being 3·8 cents. or ·03 per cent. lower than the average of the eight years is represented in Table B by 997. The quotation for 1853 is found to be 11·713, or ·02 per cent. *above* the mean, and is consequently represented by 1002, the ratio 997:1002 expressing the extent of the fluctuation that occurred in the average rates for the respective years 1852 and 1853.

In this Table (B) the fluctuations in Table A are represented by the variation above or below the number 1000, which is adopted as a datum line or average of the computed *comparative* rates for the eight years under consideration. If the totals (col. 6) representing the collective fluctuations of the five places in this table are compared with the average annual amount of Bullion held by the Bank, it will be seen at once that on the whole the *higher rates* have coincided with low averages of bullion and *vice versa*. On reference to the annexed statement—

TABLE C.

Years.	Ratios of Fluctuation in Foreign Rates of Exchange.	Average Bullion in Bank of England.
1852-53-58-59	4994	(Millions.) 18·4
1854-55-56-57	5006	12·4

it will be perceived that in the four years 1854, 1855, 1856, and 1857, when the Bullion averaged 12·4 millions, the average aggregate of these exchanges was 5006;—in 1852, 1853, 1858, and 1859, when the Bullion averaged 18·4 millions, the average was 4994;—and although the rates are not invariably high when the bullion is low, there is in no case any indication of that pressure in the form of lower exchanges, which is generally expected to coincide with a diminution in the bullion at the bank.

To investigate this somewhat further it is now proposed to examine the fluctuations in the *European* rates, with reference to the estimated amount of gold and silver Exported and Imported. A parliamentary return printed in 1858, gives the amount of *gold* imported into Europe during the years 1852, 1853, 1854, 1855, and 1856, at 100·9 millions,* and the French author Levasseur states that during the same period 96·1 millions were imported into England, and 4·4 into France. As European places receive, probably, only a limited quantity, except through England and France, the two estimates may be considered nearly to correspond. With regard to *silver* the same parliamentary return gives the import for these five years as an aggregate of 21·8 millions. Levasseur estimates it much higher or about 31·7 millions. The proportionate amount for each year would, however, be nearly the same, whichever estimate is taken as correct, and the smaller amount is adopted here as the assumed import. With regard to the amount *exported* from Europe, the great drain has, of course, been of *silver* to the East, this appears to have amounted during the eight years up to the end of 1859 to 75 millions, the *gold* sent to the same quarter having been 6·5 millions. The *gold* exported to other places out of Europe averaged about 2·4 millions annually. In the following Table (D), the figures for the years 1852, 1853, 1854, 1855, 1856, and 1857, are obtained from the parliamentary paper alluded to above;—the estimate for the years 1858 and 1859, from the third and fourth report on the Customs;—the requisite addition for the other European countries during these two years being calculated from the average of the six preceding years, and the published exports from the Mediterranean

* The estimate given in this return is for the seven years 1851 to 1857 inclusive, and reckons the increase in the *European* stock of Bullion during that period at 80·7 millions, from this is deducted 9·6 millions for the year 1851, which is not included here, leaving 71·1 millions as the addition for the six years 1852 to 1857.

† "La Question de l'Or," by E. Levasseur, 1858.

ports. It must be understood that this return is exclusive of the gold and silver produced in *Europe*.*

TABLE D.

Years.	Estimated Bullion retained in Europe.	Average Bullion in Bank of England.	Ratios of Fluctuation in the Continental Rates of Exchange.
	(Millions.)	(Millions.)	
1857.....	3·4	10·1	3014
'59.....	6·9	17·9	3001
1856.....	10·0	11·2	3010
'55.....	12·9	14·3	3002
1852.....	11·3	20·7	3000
'58.....	16·2	17·7	2995
1853.....	14·5	17·4	2996
'54.....	19·0	13·9	2982

On examining this table it is apparent that some connection exists between the amount of bullion retained in Europe, and the tendency of the exchanges here, the highest rates occurring when least bullion is retained, the lowest when the largest estimated addition is made

* The amount of bullion retained in Europe is estimated as shown in the following table:—

Years.	Imports from Producing Countries.			Exports to Places out of Europe.			
	Gold.	Silver.	Total.	Gold.	Silver.	Total.	Retained.
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1852.....	15·2	4·7	19·9	6·0	2·6	8·6	11·3
'53.....	22·4	4·4	26·8	6·7	5·6	12·3	14·5
1854.....	22·1	4·2	26·3	2·7	4·6	7·3	19·0
'55.....	19·9	3·7	23·6	2·8	7·9	10·7	12·9
1856.....	21·3	4·8	26·1	2·0	14·1	16·1	10·0
'57.....	21·4	4·1	25·5	2·0	20·1	22·1	3·4
1858.....	20·0	3·7	23·7	1·8	5·7	7·5	16·2
'59.....	20·0	5·5	25·5	2·4	16·2	18·6	6·9

The amounts of gold and silver imported (cols. 1 and 2) up to 1857, are derived from the Parl. Paper, No. 331. For the years 1858 and 1859, from the report on the Customs of Imports into the United Kingdom, adding 1·2 millions as probable arrivals at other European ports. The *silver* exported is taken from the annual circular issued by Mr. Low of the silver shipped to the East; the exports of silver to other quarters are but trifling in amount, and considered as balanced by excluding the *silver arriving* at other European ports. The *Gold* exported out of Europe is estimated at an average of 1·5 millions in addition to the Eastern remittances, except for the years 1852 and 1853, when large quantities of coin were sent to Australia.

to the European stock; and if taken in series of two years the *Fluctuations* will be found, as in Table E, to follow in regular inverse ratio with the quantities of bullion retained.

TABLE E.

Years.	Estimated Bullion retained in Europe.	Ratios of Fluctuation in the Continental Rates of Exchange.
	(Millions.)	
1854 and 1853	16·7	2989
1858 „ 1852	13·7	2997
1855 „ 1856	11·5	3006
1859 „ 1857	5·2	3008

The special feature attaching to the fluctuations set forth in the preceding Table (E) appears to be sufficiently established to warrant further investigation, more especially with reference to the large increase that has taken place during the same period in our metallic circulation. On this point Mr. Weguelin stated to the Committee on Bank Acts, in 1857, that our circulation was supposed then to be equal to about 50 millions sterling, and to have increased 30 per cent. in the previous six years; looking to the fact that 50 millions were actually coined in ten years, up to the end of 1859, it would appear probable that this estimate is too low. Levasseur, the French author before alluded to, considers the metallic circulation in England to have amounted to 60 Millions in 1848, and reckons the addition to the end of 1856, at 40 Millions; this, on the other hand, is most likely an over-estimate. But in either case, for the sake of the present argument, it can be affirmed that in the absence of heavy drains of bullion, England has been the emporium of large additional quantities of gold, which must, to some extent, have had a tendency to raise the value of other commodities. Under the influence therefore of a large increase in the circulation, an excess of imports would naturally ensue until prices were again nearer a level. Without asserting that this is the sole cause of the phenomenon, it is clear that if imports were thus stimulated, it would affect the exchanges as seen in the present table. For instance, if 18 Millions of gold, arriving from the producing countries, were retained in Europe, 10 Millions or more would probably represent our share; and supposing this to raise prices for a time, imports being stimulated, while exports were diminished, the rates would naturally *fall*; and assuming the fall to arise from this cause, it would properly bear some proportion to the amount of gold retained in

Europe. In this light it would seem that the main leverage acting at present upon the exchanges, proceeds from the gold arriving from the producing countries. Of that gold a quantity surprisingly equal in its annual amount reaches the shores of Europe, the largest share coming to England. If at the time of its arrival an active demand exists for export out of Europe, it goes immediately to supply the void, and generally after having been exchanged for continental silver. If no such demand exists much appears to be absorbed into the English currency, its action influencing increased imports and low continental exchanges.

Recurring to the fact that lower exchanges in general occur coincidentally with high bullion returns, and *vice versa*, it is probable that this appears an anomaly because a diminution of our reserve is almost invariably supposed to arise from an efflux to other countries, and that by raising the rate of discount which always brings back bullion, this gold is recovered by an increase of exports. That this opinion, however, is to a great extent a fallacy, would appear for the following reasons:—

1st. A partial suspension of business invariably ensues when any stringent measures are adopted by the Bank of England, that is to say, our exports are not, as a rule, increased under such circumstances.

2nd. A comparison of the estimated amounts retained in Europe, with the average amount of bullion in the bank, as seen in Table D, shows that these totals are quite independent of one another, and that the relatively large exports of bullion which occur when least is retained in Europe, do not necessarily affect the amount of bullion in the bank coffers.

3rd. Recent panics have indicated a simultaneous diminution in the reserves of bullion at all the great centres of commerce.

On the strength of these cumulative facts, it appears tolerably clear that an adverse condition of Bullion Reserves during the years now under review, is traceable, not so much to the *balance of trade* being against any one country, as to some universal cause acting simultaneously and sympathetically upon the principal trading communities.

The leading monetary event of the last ten years, namely, the large produce of Gold in Australia and California, has doubtless introduced many novel features; but a further analysis of the problems presented by this addition to the former stock of precious metals, is beyond the province of the present paper. The facts now brought forward appear, however, to establish the fact that as far as relates to one of the most important practical questions, the position of the Reserves at the chief entrepôts of commerce, we must no longer confine our view to the trade of any one country, or

content ourselves when considering an unexpected drain from the bank, with resting its solution upon the vague, and perhaps, therefore, generally adopted phrase of an unfavourable condition of the foreign exchanges, but study these fluctuations in bullion reserves, more with reference to the general condition of trade, as influenced at present by a large increase in the circulating medium. To throw much light upon this problem, including as it does the general effect of the gold discoveries, and their special influence upon the rate of interest and national reserves, except through the media of facts, would be expected by few, and least of all by the statist; and as a contribution to this end, the present tables are offered, and it is proposed to continue them in the Society's *Journal* for the sake of future reference in their present form, or with such improvements as may be suggested. As, however, *Silver* is quite as universal a standard of value in other countries as gold, the question of the relative value of the two metals becomes of considerable importance, more especially with reference to the large proportionate increase in the quantity of gold, and it is, therefore, proposed to close the present remarks with a few observations based on the fluctuations in the Price of Silver during the last ten years.

It is somewhat singular that the effect of the vast increase in the supply of gold has hitherto been such, that the fact of any depreciation with reference to the value of other commodities, is denied by many competent authorities; this question cannot, of

TABLE F.

Years.	Average Price of Silver in Bars, Standard.	Exports of Silver to the East.	
		From England.	From Mediterranean Ports.
1850.....	4 11·987	—	—
'51.....	5 0·988	1,716,000	—
1852.....	5 0·535	2,630,238	—
'53.....	5 1·514	4,710,665	848,362
1854.....	5 1·505	3,132,003	1,451,014
'55.....	5 1·346	6,409,889	1,524,240
1856.....	5 1·373	12,118,985	1,989,916
'57.....	5 1·786	16,795,232	3,350,689
1858.....	5 1·413	4,784,923	911,043
'59.....	5 2·036	14,682,671	1,521,970

course, be conclusively decided by a reference to the price of silver alone, as other causes, such as diminished production, or increased

demand for silver, might make it more valuable; but looking at the annual averages in the table below, the evidence afforded appears to favour the opinion that the rise is mainly attributable to a depreciation in the value of gold. In the first place, the rise has been gradual, the years 1850 and 1851 give an average of 5s. $\frac{1}{2}$ d. per oz.,—1852 and 1853 an average of 5s. 1d.,—1854 and 1855 an average of 5s. 1 $\frac{3}{4}$ d.,—1856 and 1857 an average of 5s. 1 $\frac{5}{8}$ d.,—1858 and 1859 an average of 5s. 1 $\frac{1}{2}$ d. The average for the five years previous to 1850, may be taken at about 4s. 11 $\frac{1}{2}$ d., and the argument that the rise has been caused by the increased demand for export to the East, does not appear tenable if examined in connection with the actual amounts exported in each year. Previous to 1851 the exports to India and China were not so regularly reported as at present; in that year the amount exported was only 1,716,100l., consequently before the export had attained dimensions of any magnitude, a rise in silver had been established to the extent of nearly 2 per cent.; in 1852 and 1853 the exports for the two years were 7·3 millions,—in 1854 and 1855 9·5 millions, the excess of 1854 and 1855 over the two preceding years was therefore only 2·2 millions, and yet the price rose about $\frac{1}{8}$ per cent. In 1856 and 1857 the exports amounted to the enormous total of 28·9 millions, in two years, an increase of nearly nineteen millions as compared with the two previous years, yet silver did not rise quite $\frac{1}{2}$ per cent. The amount sent out during the two years 1858 and 1859 was only 19·4 millions, or nine millions and a half less than during the two preceding years, but in silver a further rise was established of nearly $\frac{1}{4}$ per cent. These facts show that the chief advance occurred before silver was sent away in large quantities to India; and though temporary fluctuations have since ensued, a steady rise has been developed, which appears independent of the demand for India, as the fluctuations in the price are seen not to accord at all with the quantities exported.

That silver has risen about 4 per cent., and that this rise is not caused by the demand for export, seems demonstrable from the facts here given; a depreciation in the value of gold appears, therefore, the only reason that can fairly be assigned for the advance which has taken place in the price of silver during the last ten years. Whether the actual depreciation in the value of gold has exceeded this percentage, the available supply from France moderating, as imagined by M. Chevalier, the rise in silver, is a question which it is not now necessary to discuss, but it is important to observe, that the point at which it first becomes profitable to export silver from France in exchange for gold, is, owing to the nature of their double standard, when silver here is worth 5s. 1d. per oz.; and it is remarkable that the price has been much steadier since it attained this point, only rising since, in such measure as might be expected from the increasing

difficulty of procuring coin from a source which it may reasonably be expected is now beginning to fail.

The preceding tables were compiled before the close of last year, and the figures only extend to the end of 1859, the present pressure upon the money market renders it of interest to add some further particulars.

The *Gold* arriving from the *producing countries* in 1860 was less than for some years past; but on the other hand the exports of *Silver* to the East, notwithstanding the Chinese War, have been on a comparatively moderate scale. The Continent, however, appears to have absorbed more bullion than usual—the result being that more has been *exported* than imported in 1860—and in this respect the year forms an exception to any in the last decade, except perhaps 1857. The average amount of bullion in the Bank of England last year (1860) was 15·25 Millions, and the average rate of discount $4\frac{1}{4}$ per cent., being in each case very nearly the average of the nine preceding years.

The perturbed condition of the money market during the last two months of the year (1860) indicates the presence of the distinctive feature already commented upon, as peculiar to late years in the existence of a simultaneous drain of bullion from the Banks of England and France.

TABLE G.

Years.	Average Amount of Bullion in Bank of England.	Average Rate Discount, of Bank of England.	Average Amount of Bullion in Bank of France.	Average Rate of Discount Bank of France.
	Millions.	Pr. cnt. pr. an.	Millions.	Pr. cnt. pr. an.
1852	20·7	$2\frac{1}{8}$	23·6	$3\frac{1}{8}$
'53	17·4	$3\frac{3}{8}$	18·0	$3\frac{1}{4}$
'54	13·9	$5\frac{1}{8}$	16·2	$4\frac{1}{4}$
'55	14·3	$4\frac{7}{8}$	13·6	$4\frac{1}{2}$
'56	11·2	$5\frac{7}{8}$	9·0	$5\frac{5}{8}$
'57	10·1	$6\frac{3}{8}$	9·2	$6\frac{3}{8}$
'58	17·7	$3\frac{3}{8}$	18·4	$3\frac{3}{4}$
'59	17·9	$2\frac{3}{4}$	22·7	$3\frac{1}{2}$
'60	15·2	$4\frac{1}{4}$	20·0	$3\frac{3}{4}$
Average of nine years	15·4	$4\frac{5}{16}$	16·7	$4\frac{1}{4}$

The remarkable sympathy which exists in the annual average reserves of the Banks of England and France, is best evidenced by putting the above returns in series of two years. If grouped in this way, it appears that to end of 1859 the fluctuations in the average amount of bullion held by each Bank have invariably followed in the same order; this will be seen by the subjoined table:—

TABLE H.

Years.	Average Amount of Bullion in Bank of England, in Two Years.	Average Amount of Bullion in Bank of France in Two Years.	Average Rate of Discount, Bank of England, in Two Years.	Average Rate of Discount, Bank of France, in Two Years.
	Millions.	Millions.	Per cent.	Per cent.
1852 and 1859	19·3	23·1	$2\frac{1}{2}$	$3\frac{5}{16}$
1853 „ 1858	17·5	18·2	$3\frac{7}{16}$	$3\frac{1}{2}$
1854 „ 1855	14·1	14·9	5	$4\frac{3}{8}$
1856 „ 1857	10·7	9·1	$6\frac{1}{4}$	6

It will also be found that in the case of the Bank of England, the rate of Discount has been constantly maintained *inversely* as the stock of Bullion, and although the same does not hold good with reference to the Bank of France, the deviation is not of sufficient importance to show that the administrators of that Bank have acted upon unsound principles in regulating the rate of discount;—for it must be borne in mind that it was illegal to charge a higher rate than 6 per cent. prior to 1857, and that from this circumstance it was impossible to restrict discounts at the time of the greatest pressure in 1856, except by limiting the term or number of days which the Bills brought for discount had to run.

It would seem that the Average Bullion held by the Bank of England during the *nine* years to the end of 1860, has been 15·4 Millions, and the average rate of discount $4\frac{5}{16}$ per cent.; the Average amount of Bullion held by the Bank of France, including the Branches during the same period, has been 16·7 Millions, and the rate of discount $4\frac{1}{4}$ per cent. The Bullion in the Bank of France on the 10th January, 1861, was about 14 Millions, while our return for the Bank of England gave but little over 12 Millions; this appears to indicate that the pressure has been somewhat more severe here than in France, a fact of which there is but little doubt, as the rate of discount which was raised almost simultaneously at both Banks to 7 per cent., has since been lower in the open market in Paris than in London; but on the other hand, the comparatively favourable position of the Bank of France is counteracted by the undue preponderance of silver, of which the reserve now consists.

While the above figures show, therefore, a generally cautious policy on the part of the Bank of France, they appear to justify two remarks of some significance;—the *first* being, that the proper regulator of the rate of interest is the Reserve of Bullion in hand, and that timely attention to this point is as indispensable as it is beneficial;

—the *second*, pointing to the inadvisability of retaining, as by law in France, both silver and gold (in the fixed proportion of 15½ silver to 1 gold) as optional in payment to any amount. Gold being now the cheaper medium for discharging debts has, in consequence, been adopted as the leading currency; but it can scarcely be doubted, apart from the other difficulties which surround this change in the law, that if the silver coins of France were reduced in value, passing, as they do with us, as tokens, and only legal for the payment of small sums, the amount of silver in circulation would largely increase; and an equal amount of gold being thus released from circulation, would naturally flow back to the Bank, palliating without, of course, altogether obviating a pressure like the present one.

These observations may perhaps be considered as an additional testimony, supported by facts, that commercial legislation should rest upon a sound and reasonable basis; and that all such unhealthy expedients as purchasing gold at a premium, or attempting to restrict the rate of interest, may be safely and for ever discarded.

On the PROGRESS of the EXPENDITURE of the UNITED KINGDOM.
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[Read before the Statistical Society, 14th January, 1861.]

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I.—Introduction.

As a sequel to my paper on the Revenue of the United Kingdom, I venture to bring before the Society some observations on the public expenditure. A difficult task it is to form a correct view of the incidence of taxation, and to arrive at correct conclusions as to the best methods of levying taxes, with any hope of apportioning the national burdens justly and equitably among all classes of society. But equally, if not more difficult, it is to consider how far we may, without imperilling our national existence, and without disregarding the calls of an advancing civilization, economize that portion of public resources which is devoted to State purposes. And if any attempt to estimate the prospective produce of taxes has been regarded as exceeding the limits of pure statistics, how much more would it be so considered were I to speculate on the probable course of the public expenditure, and lay before you figures, the realization of which would essentially depend on extraneous influence and on contingencies wholly beyond our power of control? Nevertheless, in this, as in other branches of statistical inquiry, the past may aid us much as a guide for the future; and if we take under review a sufficiently lengthened period, and examine what we have expended in times of war as well as in times of peace, our anticipations of the future may be founded on the surest basis, and embrace the most unforeseen emergencies. Indeed I regard it as a primary object in

statistical science to show, by inductive reasoning from past experience, what is the goal towards which we are advancing, and it is by pursuing this method of inquiry, that we shall best render the labours of our Society useful to the financier, the politician, and the student generally.

A general view of the finances of the United Kingdom exhibits the following striking facts:—

II.—United Kingdom.

(A.)—Revenue and Expenditure, 1800-59.

Years.	War, Peace.	Net Amount of Taxes Received.	Amount of Expenditure.	Deficiency.	Excess.
		£	£	£	£
1800-16 ...	War	51,000,000	74,500,000	23,500,000	—
'17-20 ...	Peace	53,000,000	54,500,000	1,500,000	—
'21-30 ...	"	55,000,000	55,000,000	—	—
'31-40 ...	"	48,000,000	51,000,000	3,000,000	—
'41-50 ...	"	57,000,000	56,000,000	—	1,000,000
'51-60 ...	War and peace	60,500,000	63,300,000	2,800,000	—
1851 ...	Peace	52,000,000	49,500,000	—	2,500,000
'52 ...	"	53,000,000	51,000,000	—	2,000,000
'53 ...	"	54,000,000	51,000,000	3,000,000	—
'54 ...	"	57,000,000	60,000,000	3,000,000	—
'55 ...	War	63,000,000	84,000,000	21,000,000	—
'56 ...	"	68,000,000	78,000,000	10,000,000	—
'57 ...	{ War and mutiny.... }	66,000,000	66,000,000	—	—
'58 ...	War	62,000,000	61,000,000	—	1,000,000
'59 ...	"	62,000,000	64,000,000	2,000,000	—
'60 ...	"	67,500,000	68,000,000	500,000	—

This tabular review of our finances shows:—

That during the great struggle with France, the expenditure exceeded the revenue by 23,500,000*l.* a-year, to meet which, loans were contracted representing a funded debt of nigh 320,000,000*l.*

That on the restoration of peace, little by little, from 1817 to 1830, the revenue and expenditure were equalized.

That in the following decennium the finances of the nation again left an average deficit of nearly 3,000,000*l.* per annum.

That in the period of 1841-50, owing to the imposition of the income tax by Sir Robert Peel, the public finances were improved, and some surplus was realized.

That it so continued till 1853, after which the Russian war, the mutiny in India, and the China war have produced a considerable deficit, which if thrown on the whole decennium, 1851-60, produces an average deficit of 3,000,000*l.* per annum.

Nor have the finances of other nations been much better for

many years past. In France, for the entire period from 1830 to 1854, there was an average annual deficiency of revenue of about 4,000,000*l.* Some improvement has, it is true, been introduced in late years, but it has been effected by means of enormous additions to the public debt. The finances of Austria have become chronically disordered. An average deficiency of 10,000,000*l.* a-year is a condition which no country can bear long; and the same might be said of other countries. That nations, whose resources are limited, and whose political institutions are feebly maintained, should often be under the necessity of resorting to loans, we may well imagine; but that the United Kingdom should have been unable to pay yearly its own expenses seems very extraordinary, especially when we consider how much the capital of the nation has increased within the last sixty years. In my paper on the Distribution and Productiveness of Taxes, read before the Society in January, 1860, I have shown, that whilst in 1801 the wealth of the United Kingdom was estimated at 1,800,000,000*l.* or 112*l.* per head, the same in 1858 was estimated at 6,000,000,000*l.* or 206*l.* per head; and that whilst the income of the population in 1800 was estimated at 14*l.* 7*s.* per head, in 1858 it was estimated at 20*l.* 15*s.* per head. I have shown also, that whilst in 1801-10 the taxes of the country absorbed 25 per cent. of the national income, in 1859 the portion absorbed was only 10 per cent. That the population nigh doubled within these sixty years, from 16,000,000 in 1800, to 30,000,000 in 1860; and that whilst in 1801-10 the proportion paid per head was 3*l.* 7*s.*, in 1851-58 it was 2*l.* 2*s.* 1*d.* per head only. With facts such as these before us, it is impossible not to arrive at the conclusion that it has been want of will, rather than want of means, that has prevented this country from supplying whatever amount has been necessary for the exigencies of the State. In so doing, however, we fail in one of the primary conditions in the compact between the nation and the state, the Government incurring yearly a certain amount of expenditure voted by the representatives of the nation, on the understanding that taxes of a somewhat equal amount may be annually paid; and it is only because the people perform this duty grudgingly and sparingly, that the Government is compelled to resort to loans. As a matter of fact, the lesson we draw from the experience of the last sixty years is that this country is quite willing to pay a limited amount of taxes varying from 50,000,000*l.* to 60,000,000*l.* per annum, but that whenever an extraordinary effort has been required, whether to meet the expenses of a war, or to provide for an indemnity to slave owners, or to meet the distress caused by the potato failure, a loan has invariably become necessary. An attempt has indeed been made to repay the loans for the Russian war, but one instalment only has been paid, and we have since contracted a new loan for the fortifications.

The public expenditure for the year ending 31st December, 1860, exclusive of payment for collection of revenue, has amounted to 68,000,000*l.*, divided as follows:—

	<i>£</i>	
Interest of National Debt	27,000,000	40 per cent.
Forces { Army.....	14,000,000	44 "
{ Navy.....	13,000,000	
China War	3,300,000	
Civil list and court charges	10,700,000	16 "
	<u>£68,000,000</u>	<u>100</u> "

Here we have the important fact, that the sum expended for the civil government in this country bears the smallest proportion to all other items, Parliament is always penurious, and extremely unwilling to pass any votes for the civil services. The salaries are screwed down to the minimum; all expenses for education, health, or improvements, are looked into with the most jealous eye; but the war expenditure, however large, seldom finds an objector. Whilst in a very few nights, and with the most unanimous consent, 10,000,000*l.* or 20,000,000*l.* are voted for the army and navy, the votes for the civil service are struggled through in a most disheartening manner.

As compared with other countries, the distribution of our expenditure exhibits a striking contrast.

(B.)—Proportional Expenditure for Public Debt, Forces, and Civil Government, 1859.

	War.	Per Cent.	Interest of Debt.	Per Cent.	Miscellaneous.	Per Cent.	Total.
	<i>£</i>		<i>£</i>		<i>£</i>		<i>£</i>
United Kingdom	30,300,000	44	27,000,000	40	10,700,000	16	68,000,000
United States	8,000,000	47	2,000,000	11	7,000,000	42	17,000,000
Portugal	800,000	26	700,000	24	1,500,000	50	3,000,000
Spain	4,700,000	23	5,600,000	29	9,200,000	48	19,500,000
Austria.....	11,000,000	32	10,000,000	29	13,000,000	39	34,000,000
France.....	19,000,000	26	23,000,000	31	31,000,000	43	73,000,000
Prussia.....	5,000,000	27	2,400,000	12	13,700,000	61	19,500,000
Russia	15,000,000	34	5,000,000	11	24,000,000	55	44,000,000

In examining these statistics, however, we must of course remember that many things which in this country are promoted by private efforts and voluntary contributions, are, in other countries, entirely supported by the State; and that many things which in this country are defrayed by local or municipal funds, in other countries are paid by the Imperial Government. Still after making all allow-

ances, it is a remarkable fact that so little of the public expenditure of the United Kingdom is really spent in good and beneficent objects.

Of the three leading branches of expenditure, viz., the interest of the debt, the forces, and the civil charges, the first is subject to little change from year to year; the second is regulated mainly by the character of our political relations; and the third, embracing the whole expense of internal government, collection of the revenue, administration of justice, &c., is made up of a vast variety of small items, some of which are uncontrollable, and others are the necessary results of the increased resources, influence, and power, of the United Kingdom.

III.—Army Expenditure.

The Army Expenditure first claims our attention. Of the 15,000,000*l.* required for that service, nearly the half goes in pay, allowances, provisions, fuel, clothing, &c.; about a third in warlike stores, fortifications, barracks, wages of artificers, &c.; and the remainder in rewards for military services, pensions, &c. As the pay and allowances of the force constitute the great bulk of this expenditure, we shall first inquire into the number of men we have to provide for, and then enter into the other charges included in the army estimates. Since the commencement of the present century, the British army has been as follows:—

(C.)—Average Force of the British Army, 1800-59.

Years.	Peace, War.	Home.	Colonies.	Militia.	Volunteers.	Amount Voted.
						<i>£</i>
1800-15	War	144,000	59,000	69,000	320,000	25,000,000
'16-20	Peace	72,000	49,000	—	66,000	13,000,000
'21-30	"	51,000	38,000	—	56,000	9,200,000
'31-40	"	53,000	43,000	—	27,000	8,200,000
'41-50	"	70,000	46,000	—	16,000	9,000,000
'51-53	Preparation for War {	84,500	46,000	—	14,500	9,200,000
'54-58		War	88,000	44,000	—	15,000	16,500,000
'59-60	"	88,000	44,000	—	15,000	15,000,000
'60-61	"	100,000	45,000	—	150,000	14,800,000
'61-62	Peace	101,000	45,000	—	150,000	14,600,000

As compared with the Armies of other countries, on a peace footing, as given in the Almanack of Gotha for 1861, the British will stand thus:—

(D.)—Proportion of Armies to Population and Area.

	Number of Men on Peace Footing.	Number of Inhabitants.	Square Miles.	Number of Soldiers per 1 Sq. Mile.	Number of Soldiers per 1,000 Inhabitants.
United Kingdom....	100,000*	29,000,000	122,000	·81	3·40
France.....	316,000†	36,000,000	207,000	1·52	8·77
Austria.....	298,000	35,000,000	257,000	1·13	8·50
Prussia.....	212,000	18,000,000	108,000	1·96	11·70
Russia.....	578,000	71,000,000	130,000	·27	8·10
Spain.....	233,000	15,500,000	183,000	1·26	15·0
Belgium.....	74,000	4,700,000	11,000	6·70	15·60

* Exclusive of the army stationed in the Colonies.

† Exclusive of the gendarmes and of 70,000 troops stationed in Algeria.

It will appear from this table that, in proportion to population, the British army is considerably smaller than that of other European States. We must remember, however, that whilst in this country, owing to the respect for law, order, and peace, the military is practically quite useless in time of peace, in other countries it is always wanted to overawe the people. A correct comparison of army statistics is perhaps the most difficult thing to undertake. We can scarcely estimate the real strength of the public forces of the European States at the present moment; what proportion of them are really available, what is their state of equipment, their ages, and experience; the number under *congé* or in active service, and the number stationed at great or short distances to be depended on in cases of emergency.

If we look over the table of the British army since the restoration of peace in 1815, we shall see that in time of peace the British army at home has averaged 52,000, and in the colonies 40,000, besides the militia and volunteers, whilst the present number of our home army is 100,000. What are our prospects as regards the number of men we are to maintain? We are, at present, at peace with all nations, yet our army is just double of what it was during the whole period of peace, whilst we have now in arms nigh 150,000 volunteers. Shall we maintain our army at a war standard, or shall we return to more moderate limits? This is an important question, but it is not one for the Chancellor of the Exchequer to determine. It is for public opinion to guide, and for the Cabinet to direct. Let confidence be once introduced in the pacific relations of European States, let an end be put to the jealousies and fears which have agitated public mind for so long a period, and the Cabinet will at once see it fit to return to the peace standard of 1820 to 1840. We rejoice to notice a slight tendency towards this consummation. The

nation is somewhat tired of this constant succession of wars and mutinies. There is a time for everything, and we trust a time for peace is now coming. Should this be our experience for the future, then we may look forward for a reduction of at least 25,000 soldiers, at a saving of about 1,000,000*l.*, a measure which will be more than justified if we have regard especially to the 150,000 volunteers now in arms. Into the policy of encouraging the maintenance of the volunteer force I shall not enter. On economical grounds it is surely cheaper to entrust the national defence to the army or to a number of men who shall devote their whole time and energies to the profession of arms, than for the whole nation, or any portion of it, and especially the most active and vigorous, to neglect their daily avocation to go to drill and parade. And if the maintenance of the volunteers is not to produce some reduction in our army, the nation will pay double or treble the usual amount. Supposing each volunteer to spend 5*l.* a year in his uniform, subscription, &c., and a month in the year for drill, &c., as the aggregate of so many hours a day or week, we shall have an expenditure of 750,000*l.* and 150,000 months a-year, the value of which it is impossible to estimate. It may be said that the time thus spent is not a real waste if our young men thereby acquire muscular and physical strength, yet in so far as any present work is actually neglected a decided waste will ensue, setting aside that any intellectual effort, unless accomplished at a certain age, there is little chance of its being made at all.

Besides the diminution in the number of our home army, we should look forward to some reform in the expenditure incurred for the military defence of the British Colonies. That the garrisons of Malta, Gibraltar, and the Cape of Good Hope should be paid for by the Imperial Exchequer, is perhaps indispensable; but surely Australia, the West Indies, and Canada, are able to defray the cost of their own troops. Supposing by an arrangement with the Colonial Governments we could induce such Colonies to undertake at least the half of the cost of their military defences, we might save upwards of 1,000,000*l.* from the present colonial expenditure. This question is, I am happy to say, under the attention of Government, and as we learn that volunteer corps have been formed in most of the Colonies, I hope we shall soon hear of their dispensing altogether with the support of this country for their military defence. The salaries and allowances of our army are not capable of any reduction. When we think that the average pay of a non-commissioned officer is 38*l.* per annum, and of the rank and file 20*l.* per annum, it will be acknowledged that the inducements to enter the army are poor indeed. The general staff has nothing to complain of; an average of 350*l.* per annum is by no means low. It is the poor privates that are unpaid. The 1*s.* 1*d.* a-day, subject to so many deductions, is a

poor compensation for a life of hardship and danger undertaken on behalf of the country, and considerably less than the value of labour in any other department whatever. It would be a wise policy, with a view to the better organization of our army, and to prevent the numerous desertions, to augment the wages of privates and non-commissioned officers at least by 6*d.* and 1*s.* a-day respectively.

Some extensive reductions may safely be expected this year in the cost of warlike stores, whilst the cost of fortifications will not appear on the estimates, as it has been provided for by a special loan. The 1,000,000*l.* spent in barracks and educational provisions are perhaps all wanted; and it is all-important to spare nothing which will tend to improve the health and morals of the soldiers. As much as 2,000,000*l.* a-year are now spent on the non-effective service, but the only question we shall offer on this subject is, is it right that those who receive pensions or half-pay should in all cases retire from active service? A large number of men so rewarded are in reality in the prime of life, and I see no reason why their services should no longer be available to the country. Taking all these circumstances into consideration, as well as the state of politics, darkened as it is by the uncertainties of Italy, the ferment in Hungary, the troubles in Denmark, and the secession of the Southern States of America from the Union, it would be idle to expect that the army estimates for the next few years will amount to much less than 10,000,000*l.* to 11,000,000*l.*

IV.—Navy Expenditure.

The navy expenditure for the year ended 31st March, 1860, amounted to 12,000,000*l.*, and for the year 1861-62 votes are about to be taken for 12,000,000*l.* Since the commencement of the present century, this expenditure for naval purposes, and the number of seamen and marines provided for, were as follows:—

(E.)—Average Number of Seamen and Marines, 1800-60, and Amounts Voted.

Years.	War, Peace.	Number of Seamen and Marines.	Amount Voted.
1800-15	War	121,000	17,500,000
'16-20	Peace	26,000	8,000,000
'21-30	"	30,000	5,700,000
'31-40	"	30,000	5,200,000
'41-50	"	41,000	6,800,000
'51-53	"	42,000	6,800,000
'54-58	War	64,000	14,200,000
1859	"	59,000	12,000,000
'60	"	84,000	13,000,000
'61	Peace	77,000	12,000,000

The navy expenditure depends much less than the army expenditure upon the number of sailors and marines. Whilst the wages and victuals of the army absorb nearly 50 per cent. of the whole expenditure, the wages and victuals of the navy absorb only 38 per cent. of the whole. These items have, however, been greatly increased of late; the number of seamen is much larger than in previous years; the wages of able seamen (continuous service) were increased from 1*s.* 4*d.* to 1*s.* 7*d.* per day, and those of other classes of officers were also improved by an alteration and re-arrangement of their classification, and the rate of victualling has risen from 15*l.* -s. 7⁴/₁₀*d.* to 18*l.* 12*s.* 3⁸/₁₀*d.* per man per annum, in consequence of the higher prices of articles of provision. To these important sources of expenditure we must add the expense occasioned by the wear and tear of the ships, and the constant need of repair. The amount spent in building, converting, repairing, and fitting ships in 1859-60, amounted to upwards of 4,000,000*l.* A large number of artificers are constantly at work in our dockyards, a majority of whom being skilled workmen are very liberally paid. In late years, moreover, a great increase of expenditure has been occasioned by the substitution of steam for sailing ships. In fact, in every item there has been a large and constant increase, quite independent of the competition in which we have entered with France. In estimating the probable course of the naval expenditure, we must not ignore these various circumstances which in a manner put a large proportion of the expenditure quite beyond our immediate control.

The present number of seamen and marines being more than double the usual force in time of peace, we may hope to see a reduction of about 20,000 of them, by which we may save 1,000,000*l.*; and should the prospect of peace grow brighter and brighter, so as to render it unnecessary to continue that excessive activity which has for so long reigned in our dockyards, and enable us to reduce considerably the number of artificers, the purchase of naval stores, &c., we may make a further saving of 2,000,000*l.* or 3,000,000*l.* Should we be correct in these anticipations, we will find that the navy estimates for the five years will amount to about 10,000,000*l.*, so that altogether, from these two sources, the army and navy, we may in time realize a saving of at least 6,000,000*l.*

V.—Civil List and Civil Charges.

After having provided for our external security, it is the duty of the State to provide for the internal government, the maintenance of order, the protection of civil rights, the endowment of public institutions, and above all, for the support of the Crown and Parliament. These various expenses, included under the designation of Civil List and Civil Services, are partly constituted as

permanent charges, and defrayed by the Consolidated Fund, and partly as supply services voted yearly by Parliament.

VI.—*Civil List.*

The first of these permanent charges is the support of the Crown. The sum of 400,000*l.* appropriated for our gracious Sovereign, exclusive of the revenues from the Duchies of Cornwall and Lancaster, bears a favourable contrast with the enormous dotations of other European Courts. The Emperor Napoleon, for example, receives 1,000,000*l.* per annum. Whatever sum, however, may be allotted to Her Majesty, is, I am sure, most cheerfully and heartily paid, and no sacrifices would be deemed too great, which may contribute to the happiness of a Sovereign so pre-eminently distinguished for her wise and benignant rule, for the most endearing and attractive graces, and for her domestic and social virtues.

VII.—*Annuities and Pensions.*

What is eminently objectionable in the annuities and pensions granted for eminent services—military, naval, administrative, or judicial—is the length of their duration. It is almost impossible to realise that we are yet paying for the meritorious services rendered by William Penn, the Duke of Marlborough, and the Duke of Shomberg. Is it right to saddle the nation with such burdens for ever and ever? And for ever practically they are, because so long as 2,000*l.* or 4,000*l.* are provided for the new comers of these illustrious families, we may be quite sure that an heir or a representative will be manufactured somehow. The sooner, therefore, these pensioners are bought off the better; and as a rule, no pension should be granted for a longer period than for the lives of the grantees. Far better it is to reward liberally, by a present grant, any eminent service, than charge the nation indefinitely with burdens of this description.

VIII.—*Religious Grants.*

Some very objectionable sums figure under the head of salaries and allowances defrayed by the Consolidated Fund, such as the augmentation of stipends to the Scotch Clergy 17,000*l.*, the salaries of the Ecclesiastical Establishment in the West Indies 20,300*l.*, and the endowment of Maynooth College in Ireland 26,360*l.* An effort should certainly be made to put an end to such expenditure, for which the Government gets only blame and abuse. The West India Islands need not get money from this country in support of their churches; and the Maynooth grant, apart from its being a grant in support of superstition and error, is a yearly source of scandalous waste of time in Parliament. If the Government were

prepared to deal with even hands as regards all religious communities, they would be supported by all in the repeal of such unnecessary and ill-requited grants. The State, we must remember, derives its revenue from the entire community, irrespective altogether of their religious opinions, and therefore it is called upon in return to administer the national finances with equal impartiality. If we do not wish it to sanction religious opinions which we deem grounded on error and ignorance, we must be prepared to recommend the State to withhold its support from all religious communities.

IX.—*Diplomatic Service.*

The salaries and pensions for the Diplomatic Service, including our Ambassadors and Ministers, as well as our Consuls abroad, amount to the goodly sum of 400,000*l.* The Diplomatic Service consists of two Ambassadors having a salary of 23,000*l.*; twenty-three Ministers having collectively 97,000*l.*; twenty-three Secretaries of Legation 12,900*l.*; twenty-nine paid Attachés 9,110*l.*; and eight Chargé d'Affaires and Consuls-General. France spends an equal sum of 400,000*l.* in her diplomatic service, but her classification of Ministers, Consuls-General, Consuls, &c., is better than ours. Much remains to be done in this country towards a perfect organization of the Diplomatic Service.

It seems singular that France and Turkey should be the only seats for British Embassies. Could they not be reduced to the same level as Russia, Prussia, Austria, and the United States? There is, moreover, no reason for maintaining seven Ministers in the German States, including an annual expenditure of nigh 31,000*l.* A single mission at a central point in Germany might be quite sufficient.

X.—*Administration of Justice.*

The salaries of Judges and Officers of Courts of Justice, paid out of the Consolidated Fund, amount to the large sum of 700,000*l.*, but if we include the whole expenses of our Judges and officers, Prisons and Police, the sums spent for this purpose will amount to not less than 4,000,000*l.* We have, in the United Kingdom, 449 Judges receiving in all 534,467*l.*, the Judges of the superior Courts having on an average 4,500*l.* each, and the Judges of the inferior Courts 740*l.* each. We do not grudge the remuneration of our Judges. We like to pick out for this high office the very best of the profession, and we prefer awarding to them a liberal sum, sure that by so doing we obtain the strongest guarantee for the most scrupulous integrity and the most complete absence of venality in our courts of justice. But the system pursued in granting compensation in every case where a reform is introduced is manifestly unjust to the public.

Nothing retards more the accomplishment of solid law reforms than the fear of having to compensate every officer at all affected by them. Why should not a public or a law officer be like merchants and other persons exposed to the contingencies of changes and fashions?

The expense under this head is partly paid out of the Consolidated Fund, partly annually voted in our supply services, and partly too defrayed by local rates. The votes for Law and Justice included in the second class of the Civil Services, have been as follows:—

		£			
1835-40	.....	606,000		
'41-50	.....	949,000		
'51-60	.....	2,081,000		
	£		£		
1851	1,098,000	1856	2,257,000
'52	1,294,000	'57	2,637,000
'53	1,381,000	'58	2,462,000
'54	2,327,000	'59	2,544,000
'55	2,245,000	'60	2,565,000

XI.—Miscellaneous Payments.

Other miscellaneous services are paid out of the Consolidated Fund, about many of which the less said the better, such as the interest and sinking fund on Russian Dutch loan, the interest and sinking fund on Greek loan, and the compensation for loss of duty on the coinage of tin to the Receiver-General of the Duchy of Lancaster. In these and other items the heavy sum of 177,000*l.* is annually spent.

XII.—Supply Services.

But we must hasten to the Supply Services. These are divided into seven classes,—1st. Public Works and Buildings; 2nd. Salaries, &c., of Public Departments; 3rd. Law and Justice; 4th. Education, Science, and Art; 5th. Colonial and Consular Services; 6th. Superannuation and Charities, and 7th. Special and temporary objects. In the aggregate of these there has been certainly an enormous increase in late years.

Average Amount of Grants for Miscellaneous Services, 1835-60.

		Average.			
		£			
Years.					
1835-40	.....	2,580,000		
'41-50	.....	3,400,000		
'51-60	.....	6,200,000		
	£		£		
1851	3,950,000	1856	6,700,000
'52	4,400,000	'57	7,400,000
'53	4,800,000	'58	7,300,000
'54	6,600,000	'59	7,700,000
'55	6,600,000	'60	7,600,000

This is apparently a large increase. But if we examine each class separately, we shall find that but little saving can be anticipated in them in future years.

XIII.—Public Works.

The first class of the Civil Services is that for public works. This expenditure has increased as follows:—

		Average.			
		£			
Years.					
1835-40	.....	194,000		
'41-50	.....	417,000		
'51-60	.....	751,000		
	£		£		
1851	509,000	1856	893,000
'52	621,000	'57	926,000
'53	808,000	'58	781,000
'54	816,000	'59	794,000
'55	747,000	'60	622,000

But what have been the principal causes of this increase? First of all, the building of that huge structure the Houses of Parliament, whose stones are already rotten, and whose huge bell never yet rung. And next the harbours of refuge, the demand for which has become most imperative in consequence of the increase of commerce and numerous wrecks. Nor have we done with such expenditure. Probably, next year, we shall see the commencement of the new buildings for the Foreign and War Offices, and as to harbours of refuge our wants are now greater than ever. Our expenditure in parks, museums, and places of recreation, is indeed most limited. Yet no nation has ever deemed it inconsistent with the duties of the State to provide for the recreation, instruction, and convenience of the people, parks, gardens, and works of art which shall reflect its rank and achievements in the annals of politics, philanthropy, science, and virtue.

XIV.—Salaries of Public Departments.

The second class of the supply services is the salaries and expenses of public departments in which also there has been an immense increase since 1835.

		£			
1835-40	.....	700,000		
'41-50	.....	865,000		
'51-60	.....	1,313,000		
	£		£		
1851	996,000	1856	1,514,000
'52	1,032,000	'57	1,516,000
'53	1,033,000	'58	1,480,000
'54	1,400,000	'59	1,413,000
'55	1,300,000	'60	1,413,000

Under this class there are comprised not only the salaries, but the printing, stationery, and postage of public departments. No doubt the salaries are increased, but the business of the offices have also increased enormously. The more extensive our trading, the more complicated our relations, and the greater our influence, more work will be brought in to our public departments. Hence it is that the Board of Trade which cost 22,700*l.* in 1835, cost 35,000*l.* in 1860. But of late years new offices have been created, such as the Poor Law Auditors of Unions, Poor Law Schoolmasters, and Medical Relief; three items which cost now 140,000*l.* per annum, also the Copyhold Tithe Inclosure Commission, the Registrar-Generals, and many other offices. Printing and stationery costs now more than double what it did in 1833. The quantity of paper consumed is not less than 3,600,000 lbs. It is easy to complain of the extravagant bulk of blue books, and that few read them through, but, who would not regret to see any diminution in the documents and information published respecting our public matters? Who would recommend the withdrawal from the public of so much solid and valuable matter, which often illustrates in the most tangible manner, the conditions, wants, and prospects of society?

XV.—*Education, Science, and Art.*

The expenditure for education, science, and art, has been of late years as follows:

1835-40	£	169,000
'41-50		308,000
'51-60		869,000
1851	£	436,000
'52		470,000
'53		598,000
'54		721,000
'55		832,000
1856	£	877,000
'57		997,000
'58		1,126,000
'59		1,328,000
'60		1,305,000

This is an enormous increase, but the reason is clearly to be found in the popularity of the present system of educational grants by the Committee of Council on Education. Great value is reasonably attached to the present system which encourages voluntary efforts for education without imposing unnecessary trammels, yet I fear that the wealthier institutions are those which are most benefited. The most needy places and those most destitute of local energy are by this system wholly neglected. I know, that should the Government attempt to found schools of its own, even in the most necessitous localities, they would be met by the strongest opposition on the part of those who advocate the leaving of the entire work of education to voluntary efforts; yet it is sad to think that of the 1,300,000*l.*

now spent in the work of education, not a penny should be given to those portions of the kingdom which stand in reality most in need of it. With the permission of the Society I will offer an illustration of the working of the present system. For some years past I have taken some interest in a society for promoting religious education in the Highlands and Islands of Scotland. No portion of the Kingdom could be in greater need of the active benevolence of every philanthropic man in this country than those secluded and sequestered portions of Scotland. Far beyond the limits of trade, with a barren land and destitute of roads, the population grow up in ignorance and superstition. A society has been formed to plant schools among them, and by dint of indefatigable industry, mainly on the part of some excellent ladies in Edinburgh, a sufficient sum is yearly collected, which sustains in a very feeble manner as many as twenty-five or thirty schools, for which teachers are engaged at a miserable salary of 10*l.* to 15*l.* a-year. We thought we could get grants from the Privy Council; but, what with the endless routine work to go through, with the inconvenience that they will not correspond with the society but with each school only, and what with the requisites as to sizes of building, the want of certificated teachers, &c., not a penny have we got after three years endeavours. Of course regulations must be made, and if any school does not come up to such regulations it has no reason to complain if it does not get the coveted grants. Yet the fact is plain that schools which have little or nothing, can get nothing from the State, whereas let a school be opened in St. George's, Hanover Square, with an endowment of 20,000*l.* a-year, and the Privy Council will double it. Something is decidedly wanted in the present system, on the one hand, to reduce the number of schools supported by the State, and on the other to grant power to the Privy Council to dispense with the prescribed regulations when the exigencies of the localities justify it. The first of these objects might be obtained by specifying a minimum income for each scholar, and to allow grants to such schools only as do not possess such standard income. The condition of every school might be quinquennially ascertained, and as any one of these attains a state of self-support the State should at once cease to make grants on its behalf. Power should at the same time be given to the Committee of Council to make grants of sums exceeding the usual proportion to the amount voluntarily contributed, and to depart from the prescribed rules as to buildings, or from regulations as to correspondence, &c., as the circumstances of the case might require.

XVI.—*Superannuation and Charities.*

Class IV, Superannuation and Charities, demands but few observations here. The superannuation grants should be connected with

the public salaries, and the expense for charities is too small to demand any comment. The expenditure under this head has been as follows:—

		£			£
1835-40	.....	203,000	1856	.....	226,000
'41-50	.....	186,000	'57	.....	210,000
'51-60	.....	225,000	'58	.....	242,000
1851	.....	187,000	'59	.....	243,000
'52	.....	213,000	'60	.....	258,000
'53	.....	210,000			
'54	.....	216,000			
'55	.....	218,000			

XVII.—Colonial and Consular, &c.

Under Class V, Colonial and Consular Services, there is contained such a multitude of objects that a comparison of the expenditure since 1835, could be of little avail. As it is the total average sums are as follows:—

		£			£
1835-40	.....	361,000	1856	.....	320,000
'41-50	.....	419,000	'57	.....	382,000
'51-60	.....	380,000	'58	.....	369,000
1851	.....	425,000	'59	.....	428,000
'52	.....	369,000	'60	.....	484,000
'53	.....	347,000			
'54	.....	341,000			
'55	.....	328,000			

XVIII.—Special and Temporary.

Class VII, Special and temporary objects likewise include far too many objects for special comment. The averages under this head are as follow:—

		£			£
1835-40	.....	237,000	1856	.....	537,000
'41-50	.....	142,000	'57	.....	598,000
'51-60	.....	564,000	'58	.....	678,000
1851	.....	198,000	'59	.....	780,000
'52	.....	306,000	'60	.....	780,000
'53	.....	324,000			
'54	.....	708,000			
'55	.....	800,000			

XIX.—Interest of the Debt.

One other item remains to be considered, that is the charge for the interest of the funded and unfunded debt. This important

source of expenditure has varied but little during this half century. The decennial averages were as follows:—

		£			£
1801-10	.....	22,413,872	1831-40	.....	29,035,480
'11-20	.....	30,463,993	'41-50	.....	28,511,976
'21-30	.....	29,443,768	'51-59	.....	28,000,000

Some little reduction was obtained last year on the interest of the debt by the falling due of certain annuities, but we have since added the interest of the loan for the Russian war, the exchequer bonds of which had to be renewed, and also of the loan made for the fortifications.

XX.—Conclusions.

Bringing now these observations to a close, I would submit the following facts and conclusions as naturally flowing from the present state and prospects of the public expenditure.

1. That whilst the average amounts of the public revenue of the United Kingdom, derived from taxation, has within the last sixty years ranged from 48,000,000*l.* to 60,000,000*l.*, the public expenditure during the same period, has ranged between 51,000,000*l.* and 74,000,000*l.*, and that whenever the expenditure has exceeded to any great extent the annual amount of revenue, a loan has become indispensable.

2. That whilst in the United Kingdom 84 per cent. of the expenditure is annually devoted to the maintenance of the forces and the payment of the interest of the public debt, leaving 16 per cent. only to defray all the charges for the civil government; in all the principal European countries, the proportional expenditure is about 56 per cent. for the forces and debt, and 44 per cent. for the civil government.

3. That in any attempt therefore to reduce the public expenditure of the United Kingdom, public attention must be principally directed to the largest controllable portion of such expenditure, viz., the portion devoted to the maintenance of the public forces.

4. That the Army expenditure of the United Kingdom, which during the great war, 1800-15, had reached an average of 25,000,000*l.* per annum, has, after a period of nigh forty years of peace, when it had been reduced to an average of 9,000,000*l.*, increased, since 1854, in consequence of the Russian, Persian, and Chinese wars, to an average of 13,500,000*l.*, and in these last years to 15,000,000*l.*; and that having regard to the present condition of politics, a condition of peace—not without fears of future troubles in Italy, Hungary, America, &c., the utmost reduction that may be anticipated in the expenditure in the next two or three years, will be to 10,000,000*l.* to 11,000,000*l.*

5. That with reference to the army expenditure, it seems desirable—1st. To reduce the army for home and imperial purposes by at least 20,000 men; 2nd. To open negotiations with the Colonial Governments with a view to their defraying the whole expenses of their military defences; so that for the future the United Kingdom shall only provide for the home defence, and for such colonial garrisons as are kept up for imperial purposes; 3rd. To increase the wages of privates and non-commissioned officers; and 4th. To make better regulations for securing the services of officers in receipt of pensions and half-pay.

6. That the navy expenditure, which during the great wars 1800-15, reached an average of 17,500,000*l.*, and which during nigh forty years of peace had been reduced to about 6,500,000*l.*, has, since 1854, in consequence of the wars already alluded to, increased to an average of 13,000,000*l.* per annum, and that having regard to the present prospects of European politics, the condition of the fleet, the increased cost of provisions, and the additional expense caused by the general introduction of steam power in the navy, we cannot anticipate a reduction in the navy expenditure during the next few years to less than 9,000,000*l.* or 10,000,000*l.*

7. That inasmuch as the cost of our forces constitutes so large a portion of our public expenditure, and the state of our forces is largely governed by the state of our relations with France and the great increase of the army and navy of that country, any negotiation which might be opened with the French Government for the simultaneous diminution of military forces to limits more in accordance with the amicable relations which now happily exist between France and Great Britain, and with the state of peace which we trust may be preserved throughout Europe, would be regarded with immense satisfaction, and prove a worthy compliment to the Treaty of Commerce recently concluded between them.

8. That it would be desirable to negotiate with all such persons as possess the right to annuities and pensions for eminent services rendered by their ancestors at very remote times, for the purchase of such annuities, and that for the future no annuity should be granted for periods exceeding the lives of the grantees.

9. That negotiations should also be entered into with religious communities now receiving grants from the State, with a view to a gradual extinction of such grants, offering them compensation whenever necessary.

10. That some saving may be made in the Diplomatic Service by reducing the number of missions in the German States, and converting the embassies of Turkey and France into missions of equal standing with those in other capitals of Europe and America.

11. That the present system of Compensation to Officers of

Courts of Justice, in cases of reforms in the laws and tribunals, is essentially erroneous, there being no implied contract with such officers to guarantee them from all contingencies which might affect status and income.

12. That although the expenses for the Civil Services exhibit an enormous increase within the last twenty-five years, from 2,580,000*l.* in the years 1835-40, to 7,600,000*l.* in 1860, the increase has been occasioned partly by a change in the method of accounts, and partly in consequence of the immense development of the resources of the nation, which necessitate more public supervision, additional public offices, and corresponding increase in printing, &c.

13. That the immensely increased votes for educational purposes, though administered most satisfactorily, fail to meet the wants of the poorer districts of the empire, where the help of Government grants would be most needed, and that for that purpose additional powers should be granted to the Committee of Council of Education to relax some of the rules respecting the condition of school buildings, correspondence with schools, &c., whilst some limits should be put to the grants, by confining them to schools which are not self-supporting.

14. That the classification adopted in the estimates for Supply Services is most unsatisfactory, and that it would be desirable to construct the finance accounts in such a way that they shall exhibit at a glance the whole expenditure under the various branches of the public services.

15. That it would be convenient for the nation, as well as for Parliament, if the accounts of the expenditure could be published at the end of each six months of the year; if the finance accounts could be made up to the 31st December of each year; and if the accounts with the estimates were delivered early on the assembling of Parliament.

On the need of economy in all the branches of public expenditure, I shall not dilate. No duty is more paramount, and no object more important than that of maintaining a perfect equilibrium between the revenue and expenditure of the nation, and no higher trust could be reposed on the executive than that of bestowing a strict and watchful care upon the public purse. This superintendence the heads of the various branches of public administration can alone efficiently exercise, and of them it is most solemnly required in this critical state of public finances.

RESULTS of the TRADE of the UNITED KINGDOM during the YEAR 1860; with STATEMENTS and OBSERVATIONS relative to the Course of PRICES since the Year 1844. By WILLIAM NEWMARCH, one of the Honorary Secretaries of the Statistical Society, and Editor of its Journal.

THIRD ANNUAL SERIES, in continuation of similar Collections for the YEARS 1858 and 1859.

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PURSUING the example established at the close of 1858 and 1859 as regards a review of Trade and Prices during each of those years, I have collected together in the following Paper similar statements, and as far as possible from the same sources, respecting the commercial experience of the United Kingdom during the year (1860) just closed. It is perfectly clear that the only conclusive and satisfactory mode by which we can arrive at a right understanding of the effects produced by the great extension of the Supply of and Demand for Commodities, and the increased supplies of Gold and Silver which distinguish the present time, as they have distinguished more or less all the years since 1850, must be by a constant and careful attention to the history of the leading commodities and the leading markets. This process is, no doubt tedious, and to some persons irksome, but the same objection has ever been urged against the patient care with which science has laid the solid foundation of its great results.

I.—*Wheat and Grain Crops of 1860, and the Corn Trade of that Year.*

Messrs. Horne and Watney, Corn Factors, London, report as follows in their Annual Circular:—

“The year 1860 was the very opposite to the last three, and was one of continued anxiety with respect to our food prospects, the autumn of 1859 having been

so wet that, notwithstanding the great extent of drainage resorted to in these days by all careful farmers, no inconsiderable breadth of *Wheat land* was thrown out of rotation; then the early and long-continued winter of 1859-60, with its severe frosts, unaccompanied by its more agreeable snow mantle, destroyed the *Root Crops*; next came the injury to the *Hay Crops*; and, lastly, the almost uninterrupted rains up to the third week in December.

“The *North of Europe* seems to have suffered most from the influence of bad weather, while the *South generally*, as well as *Africa*, has been blessed by good, though not particularly bountiful, harvests. *America* had one of the finest and most abundant *Wheat crops* ever grown by her, but we are sceptical as to the fabulous quantities of Grain she is said to be able to send us, and the largest importation thence of Wheat and Flour into the United Kingdom was 2,239,722 qrs. in 1847. *Free Italy* has thrown open the trade in Corn, while *France* still struggles midway, trammelled with the ever uncertain sliding scale. A short interval of fine weather in November, 1860, allowed a considerable quantity of *Seed Wheat* to be got well in on the lighter lands, but the clays were not so fortunate, and we are sorry to say a large breadth of land remains unsown, and this remark applies to parts of Scotland. Farmers have found unusual difficulty in providing themselves with *Seed Wheat*, and we fear the nature of much of it will not stand the vicissitudes of an unpropitious winter or spring, should we have such.

Wheat.—“We fearlessly assert our belief that the crop of 1860 of *English* was, all things considered, the *worst we have seen these twenty-five years*. It has neither colour, strength, condition, weight, nor bulk, with some portion blighted and mildewed: and this is not to be wondered at, considering that Wheat can no more arrive at maturity without solar heat than a glacial mountain can remain in the sun's presence. Even the best runs are reported to make but an indifferent sack of Flour; and the worst samples are only fit for cattle food. The weights vary from 54 lbs. to 60 lbs. per bushel, although we hear of occasional samples as light as 50 lbs., and as heavy as 62 lbs. The best runs hitherto sold in the London market have averaged 59 lbs., while the inferior not above 56 lbs. per bushel. We estimate the *English crop* as deficient in the average weight, as compared with an average season, *fully 3 lbs. per bushel*; and with the fine harvests of '56, '57, '58, about 5 lbs. per bushel. This difference in average weight represents a *loss of nearly one million quarters*; but when we allow the further fair deductions for the extra quantities of moisture and bran, as well as for the less breadth of land under Wheat (which we have always maintained was the consequence of the wet autumn in 1859), we are of opinion we may estimate the *Wheat crop of 1860* at *fully one-fourth deficient* of an average yield in Flour, and which deficiency we set down at about *four millions of quarters*. If, then, during the last four years of peace and plenty we have had an average annual importation into the United Kingdom of *five million quarters* Wheat and Flour, and had little left at time of the harvest of 1860, we shall certainly now require *eight million quarters* to keep us in the same position, even bearing in mind that should our next harvest be at the usual period, we shall only have to provide for about ten months' consumption, inasmuch as we began on the last six weeks later than usual. 1860 opened with an imperial weekly average price of 44s. 2d., and closed with 52s. 6d. The highest was 62s. 11d., the lowest 43s. 6d. The annual aggregate average was 53s. 1d. Foreign stock on hand is unusually large here and at some of the outports.

Barley.—“In *England* the breadth of land sown was decidedly large, but this crop has suffered equally with that described above, and much of it is unfit for malsters' use, in consequence of its being so dreadfully weathered, thin and light to the bushel, the weights varying from 46 lbs. to 52 lbs., with an occasional sample of 53 lbs. In *Scotland* the crop was good, though not so fine as that of the previous year. The crops in *Sweden, Denmark*, and along the *Baltic Coast*, were also more or less injured by the rains, but the quantities were an average. The *Danubian* are well spoken of as to quantity, but quality not equal to last year, *Odessa* districts good in quantity and quality; *Azoff* not so good quality as usual.

and moderate yield. 1860 opened with an imperial weekly average price of 34s. 8d., and closed with 38s. 6d. The highest was 41s., the lowest 34s. 4d. The annual aggregate average was 36s. 6d. Foreign stocks on hand quite insignificant throughout the kingdom.

Oats.—"There was more than the usual breadth of land under this crop in England and Scotland, while in Ireland there was again a deficiency. Had the weather at harvest been dry, we should have had the finest crops grown since many years; as it is, we have the worst in England we recollect to have seen, the weights varying from 23 lbs. to 45 lbs. per bushel, and even heavier, while those of Scotland and Ireland are an average both in quality and quantity, though rather light in weight. Denmark had an average in bulk, but it was indifferently harvested and of light weights. Sweden had upon the whole an average in quality and quantity. Hanover, Holland, and all the German Baltic Provinces, decidedly very bad. Russia, with the exception of those districts which supply Archangel, is likewise represented as under an average in quantity and quality. 1860 opened with an imperial weekly average price of 21s. 5d. and closed with 21s. 8d., the highest was 28s. 2d., the lowest was 21s. The annual aggregate average was 24s. 5d. Foreign stocks on hand here and elsewhere are unusually small, and the local consumption of this grain increases considerably year by year.

"Beans and peas are both wretched crops, and some of the former were yet in the fields at the middle of December,

"Potatoes in England are as bad as in the worst previous year, viz., 1846; in Scotland good, and in Ireland much better than was expected during the period of the continued rains. The highest average price of this market was 250s. per ton in 1847, and the lowest was about 50s. per ton in 1834. The French and Belgian crops decidedly bad—German pretty good.

Flour.—"Many of our most experienced millers have been deceived by the small produce obtained from a given quantity of the new English Wheat; and the quality of the Flour was hitherto so inferior, that it has been necessary to mix the unusually large proportion of three-fourths of the driest new or old Foreign Wheat, and that of the brightest colour obtainable. The quality of the American arrivals has been much approved of, and as these have been sold at comparatively low rates, they have gone freely into consumption. Spain, either in consequence of her good harvest, or facilities of railway transit, or from both causes, has recommenced her supply of fine qualities, which have been specially welcomed. The year commenced with a small stock of Foreign on hand, but has departed leaving an unusually heavy one."

II.—Colonial and Tropical Produce:—Tea, Coffee, Sugar, Fruits, Spices, Tobacco.

I quote the following passages from the well known and elaborate Annual Circular of Messrs. Joseph Travers and Sons, St. Swithen's Lane, London:—

"Although the changes in the Money Market in 1860 have been unusually frequent and extensive, and the Rate of Discount, which began at 2½ per cent., has closed at 6 per cent., the course of trade in almost all departments has been, as far as legitimate business is concerned, exceedingly satisfactory. The Declared Value of our Exportations has been about 3½ per cent. in excess of the highest total previously reached, and the general consumption of Imported articles has been fully equal to anything that could have been anticipated, looking at the check sustained from the failure of the harvest.

Tea.—"The political events affecting this article during the past year have been of a marked character; commencing with agitations and speculative fluctua-

tions, consequent on a threatened continuance of the *old duty*, and followed eventually by its not only being levied, but made heavier by the addition of a quarter per cent., as well as by the fresh charges of a penny per package import tax, and ten shillings per cent. on all removals in Bond. This additional taxation was the more bitterly felt by the trade after the repeated pledges of reduction given and broken by more than one Chancellor of the Exchequer, and was submitted to only from the feeling of confidence inspired by Mr. Gladstone's other free-trade measures.

"Our disastrous reverse in China, in the attempt to force the passage of the Peiho, and our recent brilliant successes, the occupation of Pehang, and of the Peiho forts, the capture of Tien-tsin, and finally Peking itself, are matters that have been of universal interest, and belong now to history. They have had and will have a particular effect upon the Tea Market.

"The year 1860 opened with a brisk market, speculators and the trade buying freely. Common Congou advanced rapidly from 1s. 3½d., the price at the end of 1859, to 1s. 5½d., and maintained its value until about the middle of February, when the news arriving of considerable shipments, and large sales (without reserve) being continually brought forward, prices sank under the depressing influence, and receded gradually until May, when affairs in China becoming more complicated, and the question of supply more problematical, a better feeling sprung up, and a good business, lasting through July, followed.

In August, on the unexpected receipt of the news that the shipment of New Season Tea had commenced at Foo Chow, the market became very flat, and operations continued on but a limited scale, until the arrival of the "Falcon," on the 28th September, quickly followed by the "Ellen Royder" and "Chrysolite." These vessels brought some of the first class Chops of the season, which were at once put upon the market. The moderate prices asked, when compared with those of the previous year, induced active transactions.

With respects to the prospects of the coming year, 1861, everything, we think, depends upon the way in which our representatives in China are left provided with powers to force the Government there to respect the conditions of the treaty.

Coffee.—"In the Autumn of 1859, Coffee, especially Brazil, had risen to a very high price, in consequence of the small growth of that kind in 1859-60; and though the exports from Rio had been brought to a fair average by the accumulations of preceding years, kept back in the interior, yet the consumption in the three years ending December, 1859, was found to have somewhat exceeded the production or arrivals in the chief ports of Europe and the United States. Brazil furnishes about seven-sixteenths of the general wants, but is little used in this country. It constitutes about four-fifths of the American, one-fourth of the French, and one-third of the Continental consumption.

"As no sensible increase of growth in other colonies, likely to affect the general supply of about 300,000 tons, could be looked for, Coffee threatened to rule this year inconveniently high; but early in January reports from Rio announced the probability of a very large crop for the present season of 1860-61, namely, upwards of 4,000,000 of bags, or nearly 300,000 tons, and though it was soon felt that an unusual proportion of this large mass could find its way suddenly to Rio, much less to European ports, the belief in this increase greatly affected the market throughout the year. The possibility of excessive supplies, sooner or later, induced extreme caution, even whilst steadily decreasing stocks demonstrated the great wants of retailers and their customers. Coffee may be said to have been all last year, 1860, a scarce commodity; but few important transactions were entered upon without the certainty of sales, by telegraph, almost concurrent with the purchases. Upon the whole, prices have fluctuated to no great extent, the year closes with further diminished stocks.

"The production of the other Coffee colonies has for some years not undergone any material change. The kinds furnished by Ceylon, Java, St. Domingo, &c., in all about 180,000 tons, may be assumed to supply our own, and the better or

stationary class of consumers, who represent a steady but not a rapidly augmenting demand. Hence these kinds, which advanced but little in the Autumn of 1859, have, during the past year, improved to the extent of 4s. to 6s., whilst Brazil closed at the prices current in January, 1860.

"As the United States use nearly one-third of all the coffee grown, the markets of that country are carefully watched. This year, in expectation of large arrivals and low prices at Rio, they are constantly under-supplied, the deliveries, in consequence, being so small, that, by the end of November, they had fallen off about 20,000 tons.

"The fluctuations in prices in our English markets have been numerous, but neither sudden nor important. For a short time Brazil Coffee advanced 1s., whilst other sorts declined as much, and both lost another shilling in the early part of February. The smallness of the Dutch sale then advertised gave a firmer tone to the market; and that sale going off unexpectedly well in March, a smart rise of 3s. in most kinds followed, establishing about the highest point reached in the year for Brazil sorts. Native Ceylon experienced a greater advance, recovering from the depression in February, when the quotations were 56s. 6d. to 62s., 62s., to 65s., but part of this advance was lost in April, when Italian affairs and the pressure of the money market affected all business. In May, dulness prevailed, but towards the middle of June prices recovered, native Ceylon being now 60s. to 62s., and by the middle of July, 62s. 6d. to 64s. 6d., Brazil being again up to nearly the high point touched in April. Another reaction brought native down to 1s. to 1s. 6d., but in September, the Dutch sale going on satisfactorily at a slight advance on April prices, markets stiffened, and Native reached 63s. to 64s. 6d., with a further improvement in October, when these and plantation kinds had in part advanced 8s. to 9s., upon the quotations twelve months before. There has not since been any material change in these qualities; but Brazil floating cargoes, which constitute the large business in that description, have receded 3s. to 4s., and are now not dearer than at the beginning of the year. The official returns are not yet complete, but imports in British ports will have been about 32,000 tons, against 29,100 tons in 1859; exports 19,000 tons, against 13,200; and the stocks on the 31st ultimo, 7,700 tons, the consumption having been about 16,000 tons, against 15,388 tons, in 1859; and though this shows an improvement, the actual consumption has, in fact, not varied much for several years, having been even a little larger as far back as 1852 and 1854.

Sugar.—"A very large business was done in sugar in the four weeks ending in the middle of December, 1859, the transactions in that short period amounting in London, to upwards of 40,000 tons. During the close of the market, purchases were resumed, and continued, to some extent, in the early part of January, prices further advancing about 2 per cent. A great part of this business was speculative, based on the ascertained deficiency of the produce of Louisiana and Brazil, (amounting, finally, to near 150,000 tons,) but also on the expectation that our duties would be reduced. The buoyancy, however, soon subsided, and upon the Bank raising the rate of discount from 2½ per cent. to 3 per cent., speculators began to realize, and a considerable reaction seemed unavoidable. In the beginning of February the rate of discount was raised to 4 per cent.; but at this time rumours of intended reductions of the duties in France, of a Commercial Treaty with, and hope of the admission of our refined sugars into that country, promoted a temporary tendency to steady prices, though the reduction of our own duties was declared impossible for the current year.

"From the end of January to the beginning of July, sugar was, with slight interruptions, a falling article, more especially throughout April and May, the Bank having, on the 29th March, raised its rate to 4½ per cent., and, on the 12th April to 5 per cent. Money, about this time, for a few days, was singularly scarce, owing entirely to exceptional circumstances. The pressure soon subsided, and the rate was reduced on the 24th May to 4½ per cent., and subsequently to 4 per cent., at which it continued till the 8th of November. Sugar, however, continued in

a state of great dulness, and, by the middle of June, prices had receded 2s. to 3s. from the quotations of the early part of the year.

"In October it became evident that supplies, for some months, must be short, and that stocks, towards the close of the year, would be much reduced. Brewers, also, were supposed to want large quantities, in consequence of the high price of malt. The trade, as well as refiners, began to buy rather freely, and speculators operating prices advanced by the end of the second week in November, 3s. to 4s. above the lowest quotations. This improvement, however, was not long maintained, the rapid advance of the Bank rate of discount to 6 per cent., causing the excitement to subside, and prices from this time to the close of the year gradually declined.

"As the general result of our investigation, we are bound to state that Sugar has not, in 1860, fulfilled the prospects which it seemed to hold out at the beginning of the year. When the returns are complete, it will be found that the consumption of this country has experienced no increase, and that such has been pretty much everywhere the case; but no accurate statement can be furnished on this point before the end of February. As it may be assumed that England rules the European markets, it is hardly necessary to state that Sugar on the Continent has agreed with the preceding report. In France, notwithstanding a very large reduction in duties, the consumption, during the eleven months of which we have returns, has not materially exceeded last year, and is less than during the same period in 1858. Germany, Austria, and Russia use, almost exclusively, the produce of Beet, which, from the growth of 1859, gave an ample supply. The considerable imports of Java, and other Colonial Sugar, into Holland and Belgium are mostly re-exported in the shape of refined, partly to our ports, but chiefly to the Mediterranean.

"Notwithstanding the large deficiency of Louisiana, the United States have had an ample supply, with a very heavy stock over at this time; and though a very large increase of consumption has been in progress, late disastrous events will probably prevent the realization of the sanguine expectations indulged in by the holders.

"By the last accounts, prices at New York were much below ours, and about 4,000 tons have been shipped to Europe, chiefly to British ports.

"With regard to the ensuing year, 1861, there is no doubt that the supply of Cane Sugar will be ample, the excess promising to compensate for any deficiency in the yield of Beet, which is now reported to be, in France, 25,000 tons, or about one-fifth short of the previous season, owing to the unfavourable state of the weather during the summer months, a similar result being expected in Germany. We set a less value on these reports, since we are led to expect a large increase of from 40,000 to 50,000 tons from Cuba, a good growth in Louisiana and Brazil, excellent crops in our West Indian Colonies, and an increase of about 25,000 tons from Mauritius. Some attention is also to be paid to the produce of Madagascar, whence a few rather large parcels have arrived in France, and to that of Siam, to which country a great deal of sugar machinery has been sent, as well as to our own rising Colony of Port Natal. It is in our recollection that Java exported, in 1825, only 1,000 tons, Mauritius 3,000 tons. In 1843 Java had advanced to 55,000, and the Mauritius to 23,000 tons. At present Java furnishes upwards of 100,000 and the Mauritius near 140,000 tons. We are, therefore, justified in believing that where Sugar Culture can be carried on under favourable circumstances, it may and will be extended with amazing rapidity. The entire production of Cane Sugar was estimated, in 1843, at 700,000 tons, and is now about double that quantity.

"Of Beet, the growth in 1843 was 55,000 tons, and has since been raised to 420,000, but being the result of a system of protection, it comes hardly within the category of the natural course of events.

"With regard to the value of Sugar during the present year (1861), we do not look for any material alteration, expecting, upon the whole, prices to rule moderate throughout 1861. The prices of Bread and Meat threaten to continue high, and this is not favourable to a rapid progress of consumption, whilst as already stated,

supplies promise to be abundant. It is to be hoped Government will not keep us long in ignorance as to duties, uncertainty, especially if much prolonged, greatly impeding the even course of commercial operations, particularly in an article like Sugar, distributed amongst the public by thousands of comparatively small traders. We retain our conviction that *one rate only* is the best and the most profitable, not only to the consumer and the trader, but also to the revenue.

"The Refined Sugar Market has undergone frequent slight changes of prices, fluctuating between 49s. 6d. and 51s. 6d. for brown lumps, often altering without reference to the value of the Raw Material.

Fruit.—"The large reductions in duty in February (1860) have proved most successful in their results, and the year closes with an increase of consumption in most Dried Fruits. Prices have been favourable to the public and yield a better profit to those engaged in the trade than has latterly been the case.

"In currants prices are low beyond precedent, the supply abundant, and the consumption fourfold that of either 1856 or 1857.

Currants.—"The alteration in duty in February (1860), from 15s. 9d. per cwt. to 7s. (with a subsequent addition of $\frac{1}{4}$ per cent. to this rate), created some speculation, and an advance of 4s. to 5s. took place. Thus the duty paid price, after the reduction in duty had taken effect, was about 3s. lower than the duty paid price previous to the change.

"Before June this rise had been lost, and falls were effected in far lower terms than ordinary. Good currants sold at 25s., and damaged at the unprecedented price of 8s. to 16s. per cwt.

"In September, the first arrivals of this season's crop were received, and, owing to the large quantity expected, prices opened at 40s. to 42s., a low point when compared with that of ordinary seasons, but too high considering the value of the large stock of the previous year's produce on hand, the good quality of which made it a better purchase; thus the consumption fell largely on the old stock, and New Currants receded, being quoted, on 22nd September, as low as 26s. to 28s., Old Currants falling, but not in the same proportion.

"The market has since been quiet, since October, 1860, with a probability of remaining so.

Valencia Raisins.—"The price fell steadily from the commencement of 1860, until August, at which time quotations were at 22s., as compared with 40s. on 1st January, both prices including duty, which, on 1st January, was 10s., and since February, 7s., with $\frac{1}{4}$ per cent. additional.

"The variable nature of this trade may be gathered from a knowledge that a loss of from 24s. to 25s. per cwt., was incurred by the importer of nearly all the fruit thus sold; but these losses, and the prospect of a large supply during the latter months of the year, induced caution, and an opening price of 35s. to 36s. was named on the arrival of New Valencias in September.

"This satisfactory result the trade have largely to thank themselves for, as it has been very mainly brought about by the determination exhibited by them since 1859, to withstand the bad system of purchase and shipment in Spain.

Figs.—"The effect of the reduction in duty from 15s. 9d. to 7s. (with $\frac{1}{4}$ per cent. added), is very perceptible in the increased variety of growth of this fruit, figs being grown in all parts of the Mediterranean.

Spices, Cassia Lignea, Cinnamon, Ginger, Nutmegs, Mace, Pepper, Pimento, Arrowroot, Sago.—"At the commencement of 1860, there was a brisk demand for most descriptions, and prices, generally, had an upward tendency. On the announcement of the Budget, abolishing the duty on many descriptions, a good deal of speculation ensued, and rates rapidly advanced; but there was an almost entire absence of orders for exportation at the advance, and, with larger importations, a

reaction soon occurred, and quotations, in some instances, are now lower than for years past. The demand for the Home Trade has been good.

Ginger.—"The stock of Jamaica, at the commencement of the year, was very small, and prices ruled high until July. From the coldness of the season, the demand was much less than usual, and there was a decline in value until October, when more firmness was shown. Quotations are 20s. per cwt. lower than last year.

Nutmegs.—"On the announcement of the budget, there was a large business in this article, principally on speculation, and an advance of fully 4d. per lb. took place, but for a short time only, a rapid decline soon following, which continued until June, when a slight reaction occurred; from that time more steadiness was shown until November, when large arrivals caused the Market to become dull, and a further decline of 3d. per lb. was established.

Mace.—"There was much speculation on the duty being removed; prices advanced 6d. per lb., but as the demand was not equal to the supply, the improvement was soon lost, and this article is now lower than at the corresponding period of last year (1860).

Pepper, Black.—"In January (1860), the demand was very brisk, and prices advanced. From this time, until October, much steadiness was shown, when large arrivals caused a slight decline.

Saltpetre.—"The imports show the very large decrease of nearly 5,000 tons on last year. The demand has been considerably smaller; prices varied but little until August, when, in consequence of the small quantity afloat for this country, a brisk trade ensued, and an advance was realized. Since then the market has been dull, with a downward tendency."

Messrs. Horatio N. Davis and Co., report as follows respecting—

Tobacco.—"At the opening of the stock of North American growth in Europe was about 9,000 hhds. above an average of the nine preceding, arising from a succession of large crops. Holders showing anxiety to sell, buyers were deterred from operating except for immediate consumption, and at concessions, until the summer, at which period prices had exhibited a decline of 1d. to 2d. per lb., and no doubt would have receded still further had not long-continued drought and subsequently unpropitious weather indicated a diminished, in lieu of an abundant yield, which was expected earlier in the season. As the course of markets was dependent upon the extent of production in 1860, and it being pretty well ascertained towards the close of the year that it had been comparatively small, a reaction ensued, and prices recovered to the point they were at on the opening of the year, not only in the United Kingdom, but in most of the continental markets of Europe, notwithstanding the receipts at the principal Inspections in the United States proved to be 23,800 hhds. more than in 1859. The exhaustion of other growths has increased the consumption of those of the United States, not only in Continental Europe, but in this kingdom. By those well informed the American crops in 1860 are estimated at 185,000 hhds., which is about 50,000 hhds. less than those secured the preceding year, but rather more upon the average of nine. The existing stocks in Europe and America, together with the last crop, estimated at 185,000 hhds., form a total of 313,000 hhds., which, taking the consumption at the rate recently ascertained, shows a lessened supply of about 30,000 hhds. upon that exhibited at this period last year, to meet the requirements until another crop can be available. The stock now in Europe indicates no scarcity, as it is 60,000 hhds. at present, or 8,000 more than at this period last year, and which increase is chiefly in this country. The extent of the production this season will constitute an important item in the regulation of the future. At present no opinion can be formed to what degree the agricultural interests may be jeopardized by the political events now pending."

III.—*Raw Materials:—Wool, Silk, Oils, Timber, Linseed, Leather, Iron.*

Messrs. Bowes Brothers (of Liverpool) report as follows as regards—

Wool.—“The *Wool Market* now presents many features similar to what it did at the close of 1859. Stocks are light, consumption large, and prices high. For the future the parallel is far less favourable. Although the Chinese war is over, and that market again open to our goods, and though Europe is nominally in a state of peace, the increased value of food and money, the uncertain position of European politics, and still more, the unsettled condition of our best foreign customers, the United States, all contribute to produce a state of things which leaves the market open to unfavourable influences; but it must be admitted that the high range of value now ruling for *Wool* is entirely the legitimate result of consumption having encroached too closely upon supply and the main cause of high prices is still in force.

“During the year now closing the *Wool Market* has usually been steady, with a few intervals of dulness, and prices, which have fluctuated about 10 per cent., are in most instances on a par with those quoted in our last annual circular, the chief exceptions being bright-haired *combing*, domestic fleeces and competing descriptions of foreign, these having advanced 1d. to 1½d. per lb. The chief scarcity is of sound long-stapled wools, prices of which have advanced in a greater ratio than those of short tender ill-grown classes. *Canada* has this year supplied us *via* the United States, with 3,000 bags of a very suitable character for our market, but which *Wool* admits of a considerable improvement in growth, as well as greater care in classification. *California* and other countries on the *Pacific* promise to be large producers, and possess varieties of climate and other requisites calculated for raising many descriptions; and it is a question for farmers, where herbage is abundant and other conditions suitable, whether they may not do better by growing a large fleece of a breed approximating to the *Leicester* rather than a small one of the *Merino*.

“Many other countries in various parts of the world—particularly Northern Africa, Turkey, Egypt, Russia, Portugal, the East Indies, &c.—possess breeds of sheep the *Wool* of which, by the introduction of suitable rams, or by judicious crossing with the best of what they already have, might be vastly improved and rendered adaptable to many additional purposes. Care should be taken to eliminate those sheep whose white wool is spoiled by a sprinkling of thick coloured hairs; the wool should be sent to market more free of burrs, seeds, and filth; the matted, inferior, and coloured fleeces should be packed separately from the good white ones. At the same time an indiscriminate growth of long wool is not at all desirable, for the climate and herbage of some countries—which eminently favour the *merino* and *mestizo* breeds (for which *Wool* there is a sufficient and increasing demand) would prove entirely unsuitable to a larger kind. The object of these remarks is merely to suggest improvement in cases where little attention has been paid, and where much has been left to nature or chance.

“The import of *Wool* into the United Kingdom during the past eleven months shows an increase of 10 per cent. on the corresponding period of last year, and an increase of 22 per cent. on the average of the five years preceding the present. The quantity re-exported during the eleven months shows an increase on 1859 of 3 per cent., but including the export of domestic the increase is 10 per cent. on 1859; on the average of 1855 to 1859 a decrease of 5 per cent. is shown. Assuming the growth of domestic to be unaltered, though there is good reason for believing that last season there was a decrease in consequence of bad weather, the total balance of foreign, colonial, and domestic retained for home consumption during the last eleven months is 25,000,000 lbs. in excess of the average of the corresponding period of 1855 to 1859, yet stocks are lighter than at the close of

1859. With the exception of East India *Wool*, of which about 17,000 bales will be offered at auction along with probably 8,000 bales sundry low *Wools*, from the middle to end of January, the stocks of *Wool* at Liverpool are almost exhausted, and supplies much required.”

Messrs. P. W. Ronald and Son, of Liverpool, also report as follows on the *Wool Trade*:—

“The *Wool Trade*, on the whole, has been in a very satisfactory and healthy state. In the early part of the year political events abroad, and, to some extent, also at home, and subsequently serious apprehensions for the harvest, had a somewhat depressing influence, and induced all parties to act with great caution; this feeling has continued more or less throughout the whole twelvemonth, and greatly tended to impart to our trade that stability and soundness which so favourably distinguishes it at present. The exports of *Woollen Manufactures* show again an increase, as compared with the previous year, amounting to upwards of 1,000,000l. more than in 1859, hitherto the largest year. The consequence has been a steady and profitable employment of the manufacturing population in this branch, which has thus been enabled to become again good customers to the home trade. The raw material, so far as regards the yield of last year's clip of home growth, has proved materially deficient, owing to the severe and protracted winter, and consequent mortality among sheep. This deficiency has in some degree been supplemented by an increase in the imports of colonial and foreign *Wools*, which are unprecedentedly large, exceeding those of the previous year by about 58,000 bales, or 12,000,000 lbs. The exports of colonial and foreign *Wools* have also been larger than in 1859 by about 600,000 lbs., and those of home-grown *Wools* by no less than 2,500,000 lbs., owing, no doubt to the alteration in the French tariff.”

From an elaborate review of the Trade of the year in the “Manchester Examiner,” of 1st January, 1861, a newspaper standing in the first rank of the provincial press, I compile the following statement of prices (per lb.) of two leading kinds of *English Wool* in the three years 1858-59-60.

English Wools, per Pound, 1858-59-60.

Years.	Lincoln Hogs.				Middle Wethers.			
	Jan.	April.	July.	Oct.	Jan.	April.	July.	Oct.
1858	d. 15½	d. 13¾	d. 16	d. 19	d. 14	d. 13	d. 14	d. 16
'59	21	19	20	20¾	19	17	18	18½
'60	21½	21½	22½	22	19	19½	20½	20

As regards *Lincoln Hogs*, the average price in 1858 was 16½d., in '59 was 19½d., in '60 was 22d.

From the Circular of Messrs. Bowes Brothers (of Liverpool), I compile the following statement of Imports of Sheeps' *Wool*, 1856-60:—

SHEEPS' WOOL.—Imports (in Bales) into United Kingdom, 1856-60.

[000's at unit end omitted—thus 46, represents 46,000.]

Imported from	1860.	'59.	'58.	'57.	'56.
New South Wales	46,	44,	51,	47,	59,
Victoria	75,	65,	61,	59,	60,
Other parts of Australia	62,	61,	50,	53,	47,
<i>Total Australian</i>	183,	170,	162,	159,	166,
Cape	56,	48,	55,	49,	51,
Germany	14,	35,	32,	12,	22,
Portugal	23,	13,	6,	10,	8,
West Coast S. America and } Alpaca	69,	66,	49,	60,	52,
India	63,	45,	51,	56,	45,
Russia	21,	27,	16,	24,	4,
	246,	234,	209,	211,	182,
All other Foreign, &c. places ...	54,	39,	47,	63,	44,
<i>Total Foreign, &c.</i>	300,	273,	256,	274,	226,
<i>General Total</i>	483,	443,	418,	433,	392,

The increasing supplies here shown from South America, India, Russia, and Portugal, are remarkable and gratifying.

Messrs. Durant and Co., London, report as follows respecting—

Silk.—"In China Silk a diminished import of 9,000 bales, and a diminished delivery of 13,000 bales; in Canton Silk, a diminished import of 450 bales, and a diminished delivery of 600 bales; in Chinese Thrown Silk, a diminished import of 1,100 bales, and an increased delivery of 75 bales; in Japan Silk, an increased import of 7,200 bales, and an increased delivery of 5,100 bales; in Bengal Silk, a diminished import of 1,300 bales, and a diminished delivery of 4,000 bales; in Brutia Silk, a diminished import of 130 bales, and a diminished delivery of 140 bales; in Persian Silk, an increased import of 800 ballots, and an increased delivery of 1,200 ballots; in Italian Silk, a diminished import of 850 bales, and a diminished delivery of 800 bales. So that if by way of simplifying matters we include *Canton and Japan Silk* under the head of *China*, and to all intents and purposes it is right so to include them, we have a diminished import and delivery or consumption in all classes of Silk except Persian, at best an insignificant source of supply. The total stock shows an increase of 5,000 bales, but this increase is less by nearly 3,000 bales than the excess of imports of new Silk from China since the commencement of the season as compared with 1859, and this excess too has all arrived within the last fortnight, so that we see at once how closely consumption has kept pace with import, and how it has happened that in a year beyond parallel, except in years of general financial and commercial crisis, for the harrassing and perplexing difficulties with which our manufacturers and throwsters have had to contend, prices have been maintained at so high a range.

"Another point, too, worthy of notice is that as the natural result of the heavy dragging and disappointing character of their trade, and their consequent utter want of confidence, the stock in the hands of all consumers is small beyond precedent, so that with any return of general confidence, this excess would be of small

importance. But, then, whence may we look for the ground of this improved confidence? At present we fear it exists only in the fact of last year's trade having been so wretchedly bad, and the limited preparations making for the spring. The cause of that wretchedness it is perhaps little less difficult to trace, but it unfortunately existed. Our export of manufactured goods was equal to that of preceding years, and our imports scarcely greater. A change of fashion may have affected one branch of the trade, and that not an unimportant one; scanty supplies and consequent high prices, doubtless crippled consumption and checked enterprise, but these are scarcely sufficient to account for the utter want of life that pervaded the trade for the entire year. Many things were against us, especially the weather, and the state of uncertainty as to what might result from the removal of all duty upon foreign goods, but these may be expected to pass away, and with increased supplies of raw material, which may fairly be calculated upon, all may yet go well again—and may we not reasonably hope that the result of 1861 will enable us to forget its miserable predecessor.

"We might mention the course of prices as one of the great annoyances of our consumers, but it may have been rather the effect than the cause of their bad trade. From the middle of January to the middle of May we had a continually *drooping market*; no great fall, never exceeding 10 per cent., but continually drooping prices. Then with reported troubles in China, and fears that the Italian *Raccolto* was again going badly, there was a rapid rally to the highest prices of January, and with the arrival of the new silk early in September these were slightly exceeded, and so remained with slight variations, still generally with a drooping tendency, till the last few weeks. They may now be quoted at about the lowest point of the year, except for quite the 'classical chops' of China Silk.

"The chief feature of the year, and almost the only feature, was the *importation from Japan*—a most welcome and seasonable addition to our sources of supply. The only drawback to its advantage is the very small "breaks" in which it comes forward, but this is comparatively unimportant, and will no doubt be remedied in time. The grand point is, that it promises to be an increasing supply, and that the nature of the silk is intrinsically good and much of it of a size to render it especially available."

And the following account of the same article is given by Messrs. H. Waithman and Co., of London:—

"The past year, 1860, has been one of more than usual importance to the Silk Trade, and manufacturers have throughout had much to contend with. The *French treaty*, so suddenly arranged, found them with large stocks and exposed to unprotected competition with the foreigner; this and the unseasonable weather which has prevailed have proved very detrimental to the profitable realization of their fabrics. The *riband trade*, in addition to the above adverse influences, has had to contend with a serious alteration in fashion; hence the misery and destitution which have visited Coventry and its neighbourhood, and elicited from the charitable public such vast and well-bestowed contributions. To the future our manufacturers naturally look with considerable anxiety; but, with a moderate amount of enterprise and energy, they surely have little to fear. China Silk, the great staple, we can buy cheaper than the foreigner, and the price of labour, in which there has hitherto been so great a disparity, is rapidly becoming more equalized. To importers the past years has been profitable, tardy supplies and scanty stocks having combined to support a high range of prices. The demand for export throughout the year has been good, and the falling off in the deliveries must be attributed solely to the diminished requirements of our home trade. The *fluctuations in prices* during the year have been *unimportant*."

Messrs. Rose, Graham, and Wilson (London) state as follows:—

Oils.—"The retrospect of our markets for 1860 is a *pleasing one*. Our particular branch of trade was unusually exempt from anything approaching to

mercantile embarrassment, and the anticipation expressed that it would prove "a good and prosperous one" has been fully realized; notwithstanding speculative operations (*tallow excepted*) have been on a smaller scale than usual, prices of most descriptions of produce with which we are connected gradually advanced and have now reached rates calculated to stimulate production and shipments from all parts in the spring, meantime we begin the year with stocks below an average, which will tend to make any reaction which may take place more gradual and less felt. Should no political events on the Continent intervene to prevent it, we may again look forward with confidence to a large and substantial trade.

Linseed Oil.—"The production throughout the year was in excess of consumption, and the trade has been a dragging one, although a large quantity has been exported. From *January to July* prices ranged from 27*l.* 15*s.* to 28*l.* 15*s.* per ton, from *August to November* 30*l.* to 30*l.* 10*s.* The market is now quiet at 28*l.* 15*s.* We estimate the *make* throughout the kingdom for the year at 65,000 tons, against 55,500 tons in 1859 and 42,000 tons in 1858; the quantity exported at 33,700, of which 19,500 were from Hull.

Oilcakes.—"Our home made was considerably in excess of former years, so likewise was the importation of foreign into the United Kingdom, being 97,000 tons (of which we have scarcely any stock on hand) against 90,000 in 1859 and 80,000 in 1858, showing the growing appreciation on the part of feeders for artificial food. The importation of linseed cakes has been principally from America. *Rape and Oil Seeds.*—"The importation was unusually small. The continental *rape crop*, too, was a very unsatisfactory one, both as regarded quantity, quality, and condition. In consequence of such a deficiency prices advanced rapidly throughout the year. *Rape and seed oils* continue to sustain the prominent position in our markets they have held for some years past, and, independently of a large home make, 9,500 tons were imported into the kingdom last year, much to the diminution of the consumption of fish oils for burning and other purposes.

Olive Oils.—"In the early part of 1860 it was feared the importation would be short through reported injury to the crops. Such has not proved to be the case, as supplies were in excess of 1859, and about equal to 1858.

Cocanut Oil.—"Not only was the importation into the United Kingdom short, being 8,500 tons (of which 8,100 tons came to London), against 9,600 tons in 1859 and 8,755 in 1858, but the export was in excess of former years—say 7,200 tons, against 6,150 and 5,100 the two previous ones.

"*Palm Oil*, influenced by *tallow*, has ruled at high prices, although the import was in excess of the year previous. Imported into the United Kingdom in 1860, 34,000 tons; 1859, 28,300 tons; 1858, 38,000 tons; 1857, 38,600 tons; 1856, 35,000 tons; 1855, 40,500 tons. In January 45*l.* 10*s.* per ton was the value of Lagos, in November 47*l.* 10*s.* to 48*l.*, now 47*l.* The stock in London is 1,450 tons.

Fish Oils.—"Compared with former years there was a great falling off in the importation of sperm; into London only 3,000 tons were received against 5,353 in 1859, this great deficiency naturally enhanced the value, and led to the adoption of substitutes. From 94*l.* per ton in January, prices gradually advanced to 108*l.* in September, since then it has declined to 102*l.* to 103*l.* The consumption for the year was 4,219 tons, and we begin this with a stock of only 456 tons against 1,675 tons this time twelvemonths.

Whalefins.—"We had a very short importation last year, only 75 tons (exclusive of about 80 tons, the produce of our own Greenland and Davis' Straits whale fisheries). Prices have varied little for months past. Our stock is 45 against 62 last year.

Naval Stores.—"There was a falling off in the importation of rough turpentine into our port last year, and a corresponding increase in that of foreign manufactured spirits, which made the trade of distillers an unsatisfactory one. We begin the year with a stock of 3,205 barrels of rough and 8,052 barrels and 51 puncheons of spirits."

In connection with the *Oil Trades*, I print in a note at foot of the page an extract from the City Article of the "Times," of 1st February, 1861, describing the discovery in America and actual introduction into use of a new kind of Mineral Oil, called *Petroleum*, or *Rock Oil*. If the statements now made should be even partly confirmed, the extensive branches of commerce connected with the supply of Oils, will undergo rapid change.*

* "Annexed is a communication containing some precise particulars of the sources of production in America of the *Petroleum*, or *Rock Oil*, which promises to exercise a most important influence in adding to the wealth of the country, and also in improving the traffic of the several lines of railway over which it has to be transported. The only question regarding the worth of the discoveries seems now to relate to the probable permanence of the yield. If the experience in this respect should be satisfactory, the annual money value of the article is likely to rival that of some of the richest branches of existing industry. The railway lines which seem at present to be most interested in the matter are, first, the Atlantic and Great Western, a new road which connects with the New York and Erie; and, secondly, the Great Western of Canada, several wells being alleged to have been found on the flats of the Thames about a mile from Bothwell Station on that line. For a long time similar *Oil deposits* are known to have existed on the banks of the Irawady, in Birmah, but they are worked as a Royal monopoly. The belief is that they have always yielded steadily, and commanded a good market, notwithstanding the absence of facilities and enterprise in that region, and any information that might be furnished with regard to them would now be peculiarly opportune:—

"Erie, Pennsylvania, United States, Jan. 3.

"Sir,—From a recent paragraph in your City Article, I am glad to find that Petroleum, as a new item of American commerce, is likely soon to attract the notice in England its importance demands, and I write to define correctly the districts of its production, and to furnish some additional information. If you have Colton's, or any other large map of Western Pennsylvania, you will observe that the place called Union Mills is situated in Erie county, Pennsylvania, instead of New York State, and that Oil Creek, a branch of the Allegheny river, has its origin a few miles south of Union, and discharges its waters in the Allegheny, at the distance of about 30 miles. Ever since my earliest recollection (thirty years or more), and for 'time whereof the memory of man runneth not to the contrary,' Oil has been obtained from the surface of the water of Oil Creek in eddies, by spreading out a woollen blanket on the water and then wringing out the Oil, and it has been used for medicinal purposes, by external applications, for rheumatism, &c., and sold under the name of 'Seneca Oil,' from the Seneca tribe of Indians, who at one time roamed over this part of the State. About eighteen months ago a Mr. Drake sunk a well at Titusville, on Oil Creek, by way of experiment, to the depth of about 74 feet, and had the good fortune to strike a vein of Oil, the product of which has yielded him a handsome fortune. His success incited others to make experiments, and the whole country for more than a hundred miles on the Allegheny River and along Oil Creek has been carefully examined, with the result that fortunes are being rapidly realized by many. I am not correctly informed as to the number of wells on Oil Creek, but they are numerous. At Tidionte, in Warren county, further up the Allegheny, seventeen wells are in operation, producing not less than 10,000 gallons per day. There are probably a hundred wells more being sunk at Tidionte, and

Messrs. T. J. and T. Powell (London) state as follows relative to the *Leather Trade*, and it will be seen that they refer expressly to the large and notorious failures in that trade in June, 1860, of Laurence, Streatfield, Mortimore, and Co., of London, and the gang of firms connected with and upheld by them.

Hides and Leather.—"The market for raw goods does not present any very marked feature during the past year (1860). The total import corresponds rather closely with that of 1859. The exports show a slight decrease, but they by no means represent any diminished demand for exportation, the principal supplies being drawn more immediately from the producing countries. On the contrary, there is no doubt that the requirements of the Continent have greatly increased,

within 3 miles each way. The 'Crescent Oil Company,' an incorporation having their business office at this city, own a large tract of land at Tidionte, and are producing great quantities of Oil. By the 1st of April next they will have at least twenty wells in operation. At Mecca, a small town in the eastern part of the State of Ohio, is a large tract of Oil country, which is now being worked, in which the Aurora Oil Company of this city are largely interested. Considerable quantities are also produced from wells on the little Kanawha River in North-Western Virginia. The supply obtained also from a large territory on the Thames River, in Canada West, is almost fabulous. These several Oil territories are favourably situated for getting the Oil to market. From Titusville and Tidionte during the season of navigation the Oil can be run down the river in flat boats to Pittsburg, at a very low price. Tidionte is 14 miles from the railway; Titusville, 22 miles; Mecca, 9 miles; and the Canada Oil lands, from 3 to 10 miles. The wells are mere holes in the ground, about 6 inches in diameter. They are dug by driving cast-iron pipes, 4 inches inside diameter, to the rock, varying in depth from 10 to 60 feet. After finding a 'good show' of Oil, a pump is put in the well driven by steam, and the Oil and water pumped into large vats holding a hundred barrels each, the Oil rising to the top while the water is drawn off at the bottom.

"The crude Oil is sold readily at 1s. 2d. to 1s. 4d. sterling per gallon at the well, and the barrels paid for extra. It makes a better light when refined than any other burning fluid I have ever seen—second only to best coal gas, with no liability to explode like many illuminating fluids that have been from time to time offered to the public. It is also in its raw state an excellent lubricator.

"The phenomena produced upon opening some of these wells are very singular. One opened at Tidionte a week ago, spouted the oil and water to the height of 60 feet, forced by the gas, the generation of which seems at all times to be going on.

"This new trade is worthy the attention of your Oil dealers, and I hope will receive it. The supply seems inexhaustible. Wells that commenced pumping at the rate of 160 gallons per day, are now pumping six or seven times that amount, while a few, from which at their opening the Oil was forced in large quantities by the pent-up gas, have fallen off; but if the pump is stopped a few days (as has happened by the breakage of machinery) the Oil commences to flow of its own accord. Most of the works are rude, and scarcely a well is worked to its capacity. Much of the Oil territory is in the forest, the fuel for generating steam is green, and the whole thing is in its infancy. When a year shall have passed, and experience shall have taught owners and operators the true system to be pursued, the supply will be very much increased. The demand seems to augment with the supply. The refineries are not able to fulfil their orders, and it is scarcely used in the rural districts. I hope scientific men, as well as dealers, will turn their attention to it. It is understood here that large quantities of a similar product from the valley of the Irawady finds a market in London. How is this?

"G."

and that all calculations for the future of the Hide market must recognise this fact. The shipments to the United States have been small throughout the year, and should the existing depression in prices, which the political excitement has occasioned, continue, we may expect, at least for a time, to receive Hides from that country. Prices of raw goods were buoyant for the first three months, but in June an universally lower tendency prevailed. The failures of July doubtless accelerated their decline, but prices in general still afford little margin for profit to the manufacturer.

"We cannot dismiss our retrospect of the year 1860, without a more distinct reference to the disasters which it has witnessed, and which will long make it memorable in the trade. That so gigantic an amount of commercial rottenness should have existed, and have carried so bold a front for so long a period, may well have surprised those unconnected with the Leather and Hide trades, and have obtained for these trades generally an unenviable notoriety, when to those within their sphere the disclosures excited the utmost astonishment. Since the publication of the proceedings in the Court of Bankruptcy, the only wonder is that the catastrophe did not occur earlier. It is, however, important to remember, as we stated in our circular of August last, that of the enormous aggregate of the liabilities of the firms that suspended payment, a very small proportion was due in the trade, and that the *monied interest are the principal losers*. We avail ourselves also of the present opportunity to contradict the evidence that has been given, more or less directly, stating that the custom of the trade is represented in the practices that the evidence in bankruptcy has disclosed. That the parties concerned may have had transactions analogous to other Leather factors, we do not dispute; but that the system that has been pursued of propping up houses that have been brought to hopeless insolvency by a course of excessive overtrading, has any representative in any dealings in the Leather and Hide trade outside the circle of the firms that have failed, we most positively deny. We believe, on the contrary, that the trade in general is in a sound and healthy state, and that the relations of the manufacturers and factors are of an independent and legitimate nature.

"We hope, however, that the lessons which these disgraceful disclosures are calculated to teach will not be forgotten, and that a system which will give to capital and fair dealing their rightful position, will be scrupulously followed; we may then anticipate great advantage from the removal of so much undue competition from all departments of the Leather and Hide trades. These misfortunes could not, however, diminish the consumption of leather, which must have been, in consequence of the wet season, *unusually large* during the past year. There is also no doubt that the *production has been greatly lessened*, and that dealers have to the utmost restricted their purchases. The stocks of Leather are by no means excessive, and we are therefore of opinion that with restored confidence, the prospect for the Leather trade is more satisfactory than for some time past."

From the Circular of Messrs. Boutcher, Mortimore, and Co. (London), we obtain the following passage:—

Leather.—"The Leather trade has suffered greater changes during the past year, than have ever before been witnessed, and has been placed before the public in a most discreditable and false position. It is difficult for any one, unconnected with this branch of business, to understand how little the great bulk of those engaged in it have been directly affected by the fearful disasters that have taken place. The houses which have failed were nearly all connected together, and their business almost wholly confined to transactions with one another. The losses that have resulted have, in consequence, fallen for the most part upon the holders and discounters of bills, and but a comparatively small amount of actual capital has been withdrawn from the trade.

"The judicial investigations which have taken place make it clearly manifest that for some years past several of these houses have been largely engaged both in tanning and Leather dealing, regardless of the profit or of the risks they were

running. This has caused much mortification and perplexity to those who, having adhered to correct principles of business, have been compelled either to contract their operations or to continue them without an adequate return for the capital employed. The present year opens with more favourable prospects. Credit is now at its *minimum*, and, although the raw material is still relatively high compared with leather, it is quite certain that prices are not sustained by the competition of manufacturers supported by undue facilities. It may also be taken for granted that the sale of leather throughout the country will no longer be competed for by parties to whom profit or loss is not the first consideration.

"Prices have been less affected by the year's vicissitudes than might have been expected. During January the demand was unusually brisk, and some articles advanced; from that time comparative dulness prevailed until Midsummer, after which the trade was paralyzed for a short period by the heavy failures referred to. These, however, happening to occur just previous to the briskest season of the year, produced but little immediate effect in depressing prices. Some months later, the usual supply of fresh goods having been augmented by large stocks of bankrupt estates, a gradual decline in prices took place, which now average from 10 to 12 per cent. below the quotations of our last annual price current. Less Leather is held in factors' warehouses at the present time than at this period last year, and stocks, both in town and country, are in general unusually light. In looking forward to the probable supply during the current year, we have only the legitimate production of a diminished number of tanyards to depend upon, which will, we anticipate, prove unequal to the greatly increasing requirements of the country."

The following passage is from the Circular of Mr. Thomas Thorburn, relative to the—

Scotch Iron Trade.—"Another year has been characterized by depression in the Iron Trade. Early in January, owing to the political situation of the Italian peninsula presenting signs fraught with danger to the peace of Europe, a feeling of uneasiness arose in the market, and prices fell from 57s. 6d. to 55s. per ton. But the announcement by France of the principles of free trade appearing simultaneously with a strike among the colliers and miners, and a threatened stoppage of several furnaces, created a speculative movement, and a rise to 61s. took place at the 1st of February. This advance was of short duration. The termination of the strike and the blowing in of the furnaces produced a reaction, and the price declined to 54s. before the end of March. The conviction gaining ground that the production continued to be in excess of the demand a further reduction ensued, and sellers were willing to take 49s. 6d. about the 1st of June. From that time onwards prices have been mainly regulated by political and commercial probabilities, and have fluctuated between 50s. and 53s., making the year's average 53s. 6d. per ton—a rate considered scarcely remunerative to ironmasters in general.

"It is not surprising, considering the aspect of politics, the deficient crops over a wide area in Europe, and that in the course of four weeks there were in the value of money no fewer than four violent changes, each giving a shock to commerce, there has been an irrepressible tendency towards lower prices. Notwithstanding the stoppage of eighty furnaces for nearly five weeks, the produce in the last twelve months cannot be computed at less than 1,000,000 tons, and shows an increase when compared with 1859 of 50,000 tons. This augmentation arises not so much from an increase in the number of furnaces as from the intrinsic improvements in the process of manufacture. The shipments and local consumption combined amount to 903,000 tons, and exhibit a decrease of 12,000 tons in comparison with the same period last year, the stocks have therefore increased 97,000 tons, and are now 427,000 tons lying in warehouse-keepers' and makers' stores, exclusive of Carron.

"The malleable works, founderies, and shipbuilding yards have experienced, to a moderate extent, that revival of prosperity which has marked almost every

department of trade throughout the present year. Though the financial disturbances in America are complicated with political passions of an intensity never before known, yet there are favourable elements in our position in regard to that country, so as to encourage perfectly satisfactory anticipations. The price is now twenty per cent. lower than it was previous to the crisis of 1857; and as experience proves that cheap rates produce an increased demand, and that in the ensuing Session of Parliament no fewer than 302 bills will be brought forward to extend or improve existing railways, and, further, considering that the treaty with France has laid the deep and solid foundation on which is to rise the most gigantic fabric of commercial prosperity the world has ever seen, it is reasonable to anticipate a vast and increasing demand for all kinds of our manufactures, especially for iron."

Messrs. Churchill and Sim (London) describe the Wood Trade as follows:—

Wood.—"The importation of Wood from our North American colonies not having diminished during the past year, and our supply from the North of Europe continuing to increase, the total for 1860, for the use of the United Kingdom, has amounted to nearly three millions of loads; while for many previous years the supply has varied from 2,000,000 to 2,500,000 loads. The sale of Wood throughout England has been larger during 1860 than hitherto known. In the northern, eastern, and western districts, there was an early demand for the wood which had been stored on the close of the season of 1859; and the announcement of the abrogation of the foreign or differential duty the usual speculative operations of the trade gave more impulse to selling and buying. In the London Market, which is less dependent on speculation there was so steady a demand that the consumption of the stock, though large, could be anticipated in due time and before the new season of importation. But when buyers on all sides were ready to speculate in contracting with foreign shippers at advanced prices for the Wood at ports of shipment, half of the abrogated import duty was soon absorbed, the remainder was lost sight of or included in the additional freight paid for late Baltic voyages, and the result is a very large and costly importation of foreign Wood without any diminution in the price here through the remitted import duty exceeds 10 per cent. of the gross value. It would not be right to assume that the trade in Wood has increased solely in consequence of the reduction of duty, but looking to the great demand of the country for foreign supplies, the cost of Wood would be disproportionately high if the old duty of 55s. per load were now payable, as we sell the common timber of the Baltic for this price, and often for less.

"For ten years and more before the year 1831 it used to be stated in evidence before the Houses of Parliament that the annual imports of Wood would average 1,000,000 loads—half foreign, paying 55s. per load of duty, and half colonial, paying 10s. From 1831 to 1841 the imports ranged from 1,100,000 to 1,500,000 loads, nearly two-thirds being colonial, and paying the low duty. In 1842 and 1843 the foreign duties were reduced to 30s. and 25s. per load, and upon colonial timber a nominal charge of 1s. per load was levied. The imports did not increase during these two years of transition; but from 1844 to 1851 they rose from 1,500,000 to 2,000,000 of loads per annum—three-fifths of the supply still coming from the colonies.

"From 1851 to 1859, with the last reduction of the foreign duty to 7s. 6d. per load, the imports rose from 2,000,000 to 2,100,000 loads, with an average of half of colonial growth; and in 1860 the imports are computed as 2,990,000 loads; and the customs' entries (including some Wood bonded in 1859) will show the probable total of 3,300,000 loads."

The facts given in the extract relative to the rapid increase of the Timber Trade, and the stimulating effects of liberal and low Customs' Duties should not be forgotten.

IV.—Cotton, Woollen, and Linen Trades:—Supply and Prices of Raw Cotton.

Messrs. Robert Barbour and Brothers, of Manchester, make the following report of the *Manchester Cotton Trade of 1860*:—

"On the whole the year 1860, closes with a cheerful and rather sanguine feeling. The balance sheets, however, of 1860, will in most cases, be much less satisfactory than those of 1858 and 1859. Most of the shipments made to India during the year will result in very heavy losses, while those to China will yield little or no profit. The South American Merchants have done a more satisfactory business than for some years past; the West Indian demand has been under the average and the results of the favourable harvest in Canada are yet to be realized. The manufacturing interest, though not so prosperous as during 1858-59 contrasts most favourable with the depression which prevailed previous to these years. The cotton district consequently progresses in material wealth and enterprise, and the year will be signalized by the opening up of an intercourse with China and the conclusion of a commercial treaty with France, from both of which events great advantages are expected to arise. Some drawbacks and discouragements however cause anxiety. *The supply of labour is insufficient, and already there are looms in the district which are idle for the want of hands to work them.* The great question, however, is how to get a sufficient quantity of the raw material to meet the increased demand likely to arise from New Mills being brought into operation. The hostility at present existing between the Northern and Southern States of America may assume such an attitude as to limit our main supply, and cause cotton to approximate in value to flax. Such a consummation would be nearly as calamitous to this district and the country generally as a dearth of corn; and the public mind cannot be too much alive to the importance of the subject."

From the "Leeds Mercury,"—always so able and reliable on every topic connected with the West Riding—we take the following report of the—

Woollen Trade of 1860.—"The advent of 1860 found a state of general activity throughout the Woollen district, and the future was looked to with confidence. During the first three months of the year the trade was very good. The manufacturing localities were extremely busy; *not a loom was idle, nor a workman unemployed and the wages earned by some of the operatives were large and satisfactory.* As fast as goods suitable for the mantle trade could be produced they met with ready sale, both for the home and foreign market. This buoyancy for fancy goods continued until April, when it received a check. Inclement weather and a late Spring interfered seriously with the sale of light fabrics, and we are afraid the wet weather that supervened during summer will have caused a great portion of the spring stocks to remain on the shelves of the drapers.

"The growing and important trade to China and the East, contributed very largely to the activity prevalent in the Spring. The trade, however, received a check on the commencement of hostilities, but on the receipt of pacific news during the Autumn a revival took place, and now that peace is definitely concluded, a still further improvement may be hoped for. The volunteer movement gave another element of prosperity.

"The ordinary *plain broad cloth cotton trade* has not been buoyant during any period of the year. Low and middle qualities have had a good sale, but superfine could be moved only in small quantities.

"As previously intimated, an extraordinarily wet Summer followed a late Spring, and the prospect of a deficient harvest was apparent. A steady but considerable contraction of trade was observable, and the demand for the winter

season had none of the buoyancy of the spring trade. It was sluggish and moderately steady, but perhaps will be an average one.

"Viewing the *home trade* for the year in the aggregate, we think it will not be an improvement on the previous year, nor will it be much less. However, if under the unfavourable circumstances of the past year the trade has maintained a firm position, it must be considered satisfactory.

"The *foreign Trade*, in the aggregate, like the Home, has shown no decided improvement. To the United States, Brazil, Buenos Ayres, and the East Indies, our exports have fallen off considerably, but the deficiency is more than counterbalanced by the increase to China and Hong Kong, and North America.

"The present state of the *Woollen Trade* is sound and healthy. Stocks are not large, nor is there any great preparation going on, nothing beyond what the usual requirements of the season warrant. And as to the prospects of the new year, let us hope they will improve as it proceeds. The advance in the Bank of England's minimum rate of discount from 5 to 6 per cent., yesterday afternoon, is not a very gratifying adieu to the old year, and if we were to indulge in any bright anticipations for the new year, this step, decided on out of the regular course of the Bank proceedings, would rebuke us, as no doubt the directors have adequate reasons for the course they have adopted."

The following statement, from a local paper, relates to the

Flannel Trade of Rochdale.—"The closing *Flannel and Wool markets* here for the year 1860, have been of rather a quiet character. Prices of goods, however, continue steady, the manufacturers are well employed, and the prospects for the spring trade are of a fair character, though they are somewhat 'sicklied o'er' with a feeling of fear as respects continental affairs. The *Flannel trade* of this district for the year 1860, has been one unparalleled as to its extent, and the same may be said as to the aggregate profits. Throughout the greater part of the year the demand has been in advance of the supply, and this circumstance would warrant the inference that the manufacturers have obtained highly remunerative prices for their goods. Profits, however, have been diminished by both the advances which from time to time have been made in the price of wool, and by an increase in the cost of production. Notwithstanding these drawbacks, there is no doubt the manufacturers have had a very profitable year. Wool is moderately firm at present, but is not so buoyant as it was a few months ago, the fears about a deficient supply having become little more than a thing of the past."

Messrs. Dewar and Sons report to the following effect on the—

Linen Trade of 1860.—"In the home markets the *Linen trade* has, like most other branches of business, suffered much from the severity of the weather during the past year. It is seldom, indeed, that so great a want of life or activity has been observable as towards the close of the year. The *export trade* appears to have maintained its position, the returns showing a slight increase over 1859. But there is a falling off in the exports to the United States. How our trade may ultimately become affected should the secession movement be carried into effect, it is impossible to say. Taking the year as a whole, we cannot say that it has been a satisfactory one in the Linen trade; it has been by no means a profitable one; the only thing is, that much has occurred which gives better promise for the future. And we trust that, as our ports are in a great measure free, so far as Customs' duties are concerned, to all the world, our Government will not fail to urge upon other countries the justice of reciprocating with us in a corresponding spirit of commercial freedom. To the Linen trade one of the most valuable movements that has yet been made has been the establishment of the *Indian Flax Supply Company*. There never was at any time a greater necessity for a large supply of flax than at the present. Already France has concluded treaties, both with Belgium and Prussia, so that we shall have a formidable competition to meet in the French

markets as soon as they are thrown open. In all those countries there is an ample supply of the raw material, which gives them an immense advantage over us. We have every confidence, however, in the scheme for procuring an ample supply of flax from the Punjab. By the last advices received it appears that the company has already commenced operations—their manager having contracted for a considerable acreage of flax on the most favourable terms. Every assistance has been rendered by the authorities in the Punjab, while the native farmers are most favourably disposed towards the cultivation of the plant—the only thing needed being, as we have said from the first, a certain market for their produce when prepared for it. This they will now find at their own doors; so that, with a supply of the best description of seed, and the most improved machinery for the preparation of the fibre, we have no doubt that ultimately, in a very few years, our supply of flax from the Punjab will be amply sufficient to meet the requirements of the trade.”

Messrs. Colin Campbell and Son, of Liverpool, state as follows relative to the—

Trade in Raw Cotton.—“The import of Cotton Wool into Great Britain during the year 1859, which amounts to 3,366,626 bales, is the largest on record, being 537,726 bales in excess of that of 1858, and which excess consists mainly of the produce of the United States of America. The stocks in all the ports of Great Britain, as nearly as they can be ascertained, amount, in the aggregate, to 594,519 bales, being 125,090 bales more than was held a year ago. On the assumption, then, that the trade hold about 130,000 bales more than they held at the close of 1859, the consumption would amount to 2,503,080 bales, being 48,136 bales weekly, consisting of 40,954 American, 2,065 Brazil, 1,862 Egyptian, West India, &c., and 3,255 East India, against 44,123 bales consumed weekly in 1859, which consisted of 36,668 American, 2,027 Brazil, 2,016 Egyptian, West India, &c., and 3,412 East India. The increased consumption over last year amounts, in the aggregate, to 208,670 bales.

“So vague were the ideas entertained as to the requirements of every country, that it was all but taken for granted that if the American crop should amount to 4,250,000 bales, which was the highest estimate, at the close of 1859, the supply would be ample for the rapidly increasing consumption of the world. But, during the first three months of 1860, it was apparent from the magnitude of the receipts into the American ports that the extent of the crop had been much *under-estimated*, and during that interval the imports from all quarters amounted to 1,186,450 bales, and the stock in this port at the end of March fell very little short of 850,000 bales. So far, very little decline had taken place in prices, as the trade of the country was sound, and much encouragement was given to the extension of it by the manifesto of the Emperor of the French in favour of a more liberal commercial policy.

“In the meanwhile, because of the large export of bullion to the East, the rates of discount, which were at the beginning of the year at 2½ per cent., were gradually raised, until, at the end of March, they reached 4½ per cent. Still, however, and in spite of an import of Cotton during the months of April, May, and June of nearly 1,200,000 bales into this port, prices were not seriously affected, although it was then beyond all doubt that the American crop would exceed 4,500,000 bales.

“But, at the end of the *first week in June*, the stock here had so accumulated that, contrary to all experience, it had then obtained its *maximum* for the year, and amounted to 1,358,200 bales, but, fortunately, the rates of discount were reduced towards the close of that month to 4 per cent. The fact could now no longer be disguised that the stock which, in value amounted to 11,000,000*l.* or 12,000,000*l.* sterling, and had cost the *importer* very much beyond that amount, as he had based his operations on a much smaller estimate of crop, was *inconveniently held*, and, in spite of cheap money, the urgent necessities of some holders compelled them to force sales at the best prices attainable. The heavy weight of import was then pretty much at an end for the season, but a question arose as to how the then

unmanageable quantity of common and inferior qualities of American descriptions could be disposed of, and, therefore, but only for a short time, *prices were as low* as they had been for many years.

“Notwithstanding the prevalence of wet weather in this country during July, August, and September, and which resulted in a deficient and inferior grain harvest, a very large business was done in Cotton, and it would be difficult to say whether *spinners, speculators, or exporters* were the most eager competitors for quantity. There can be no doubt that the depressed prices, which were current for some time, were the means of largely *extending the consumption*, not only in this country but on the continent of Europe, besides which many *new mills*, both here and elsewhere, had been brought into operation, and it was also worthy of being recorded that the *export* from this port alone has amounted during the present year to at least 10,000 bales weekly.

“The advices had been for some time past of an unsatisfactory character as regards the new crop in America, but, until *October*, very little importance was attached to the extent of injury alleged to have been done by drought. Then, however, it became apparent that such was the fact, and apprehensions are so strongly entertained that the American crop of Cotton will prove very short, that operations have continued on a very large scale. The fluctuations in prices have not been very great, but from the lowest point in *July* to the highest on this day (31st December, 1860), there has been an *advance* realized of 2½*d.* to 2¾*d.* per lb. on the common qualities of American descriptions, but of not more than 1½*d.* to 1¾*d.* per lb. on the medium and better. The erroneous estimates which were made at the close of last year of the *American crop* prove how difficult it is to form an opinion of even probable supplies for the year, but so far as we have been enabled to obtain information we are disposed to think that from every country where Cotton is grown, except America, the supply will be *larger* than it was last year, and, most likely, considerably so from India; but, on the other hand, we entertain fears lest the crop of the United States should not exceed 4,000,000 bales.”

V.—Freight Market and Shipping Interest.

The following is from the Circular of Messrs. W. S. Lindsay and Co., London:—

“During 1860 English Shipping has fully maintained its position with the vessels of other countries. By the official returns it appears that we have in our *foreign trade* much more tonnage employed than all other nations combined, and that there is no prospect, after ten years' experience, of foreign competition seriously injuring our shipowners, much less supplanting them in any branch of the carrying trade, even though (through the apathy of the executive) their property is still subjected to those special burdens and vexatious restrictions peculiar to a state of protection.

“Throughout the year 1860 there has been very little fluctuation in the rates of freight, and the average to and from the leading ports has been somewhat as follows:—

	To Port Philip.	From Odessa.	From Alexandria.	From Galatz.
	Per reg. ton. s. d.	Per ton. s. d.	Per qr. s. d.	Per qr. s. d.
1859	76 10	44 7	4 9	10 —
'60	79 2	48 9	5 1	10 11

“There has been a marked advance during the last three months in *grain freights*, especially from the United States, from which country we have imported

during the first eleven months of last year 1,078,416 qrs. of wheat, and 1,787,236 cwt. of flour, against 18,079 qrs. and 119,987 cwt. respectively during the same period of 1859; but, though shipping has found readier employment in 1860 than it did in either 1858 or 1859, the year just closed has not, upon the whole, been a prosperous one to shipowners generally. The present year offers much better prospects.

"Our exports and imports continue to increase rapidly; but the increase of tonnage has been small as compared with former years. Take New Brunswick, for instance, which has long produced that description of vessel best adapted to compete with our rivals, the ships of the United States. In 1856 there was built in that province 79,907 tons; in 1857, 71,989 tons; in 1858, 26,263 tons; in 1859, 38,303 tons; and in 1860 the estimate of new ships built is under 20,000 tons. And it will be found that the relative proportion of vessels built during the last few years in all parts of the world is somewhat similar to what those figures show for New Brunswick. There are, no doubt, exceptions, but all our advices lead us to believe that in the United States, in Norway and Sweden, and in the north of England, there have been fewer sailing vessels constructed in 1860 than in any of the previous five years. If this be so, then, when we take into consideration the numerous losses and disasters, and the rapid increase of the over-sea carrying trade, it is pretty evident that there must be a scarcity of tonnage before the close of the present year, and that before long freights will advance."

The following is from the Circular of Messrs. Alfred Laming and Co., of London:—

"The year which has elapsed since the issue of our last circular is more remarkable for its promises as to the future than for any influence it has had in immediately affecting the interests of our shipowners; how soon and to what extent the new prospects will be realised are not yet clearly to be seen, their realization resting chiefly in the hands of nations little accustomed to changes, and on whom the energy of the more commercial and enterprising countries of the world may only slowly operate. But while we have but small progress to announce, we have the satisfaction to believe that none of the events which the year has witnessed are of a nature to retard the improvement which has been steadily progressing, more particularly in steam navigation, for the last few years; the diminution in ship building generally, the best cure for existing evils, still continues. One result of the year will be the consequences to be secured by the present occupation of the capital of the Celestial Empire; and we may feel certain that, taught by a previous abortive reliance on moral securities, the united embassies will exact in the present instance all the material guarantees for extending European commerce into the heart of that country that they may find available. Hence we anticipate augmentations in our Chinese exports and imports, though their imports will probably only attain due proportions as the force of progress shall slowly break down existing obstructions to the inland circulation of merchandize, and which the interests and prejudices of local authorities will prompt them only very gradually to abolish. What the war with China has hitherto done for our commercial navy, consists mainly in having taken away towards the latter end of 1859, for Government service, many sailing vessels and large steam transports, which are still out, and which by the time they are discharged will have had profitable employment for about eighteen months. We may also notice that during the whole of 1860 the same war, in conjunction with the Italian revolutions, has tended to enable both large and small steamers, generally to find occupation at remunerative rates. By late accounts from China we learn that many sailing vessels had been paid off, and will probably be returning to this country, followed closely by others, both sailing and steam, whose discharge is likely to be an immediate consequence of the cessation of hostilities.

"Freights from the East, with the exception of those from Calcutta during one or two months, have ruled low, causing freights outwards to be proportionately

high. Our last advices from Bombay, report improvement in the demand homeward, consequent upon a presumed necessity for reinforcing our troops in New Zealand, but the improvement will probably have been reversed on the arrival of the news of the Chinese treaty. Screw steamers have found fair employment in the Baltic throughout the year, and more particularly towards its close, when freights rose to 40s. per ton for tallow from Cronstadt, 6s. 6d. from Dantzic and Königsberg, at which they stood so long as the navigation remained open. Recently we have had a good demand for screw steamers from France for large quantities of grain. In the Mediterranean they have been in great request. From Patras, Smyrna, Alexandria, Constantinople, and Odessa, steam freights have ruled high during the season; Patras having made a large demand by exporting currants to an amount estimated at 30,000 tons. About forty screw steamers have been despatched with full cargoes to Italy from this port alone. How rapidly steam is increasing in the Mediterranean will be seen by bearing in mind, that it was in 1857 that the first steamers were sent to Italy by ourselves; and that the trade by steam tonnage from Liverpool to the Mediterranean, which is now enormous, was only inaugurated twelve years ago, by a line of three steamers, of which we were the agents.

"For the future we have good prospects of a steam trade with United Italy, when Naples and Sicily shall have been put under the Sardinian tariff, and the resources of the neglected interior of those parts made available to commerce by roads of communication opened up to the seaports.

"Outward freights to Australia and India are firm, and the demand good. For Australia, 4l. per ton is offered for moderate-sized vessels. Coal freights to King George's Sound are quoted 43l. from the Tyne; Calcutta 43l.; Bombay 38l.; Madras 42l. Homeward freights are scarce, but the last accounts from Calcutta report a rise of 5s. per ton, freights being quoted at 3l. 2s. 6d. to 3l. 7s. 6d.; from rice ports, 3l. 10s. to 3l. 15s.; from Mouline, for teak, 4l. 10s.; from Bombay, 2l. 15s. to 2l. 17s. 6d. Outward freights to the Pacific are dull; Calico is quoted 36s. 6d.; guano rates are 60s. for vessels of not above 900 tons, and 5s. additional for continental clause. In the Mediterranean coal freights are on the decline. We quote from Odessa, 50s.; Danube, 10s. 6d.; Alexandria, 5s. Outwards: Genoa, 22l. 10s.; Malta, 19l.; Constantinople, 18l.; Odessa, 17l. For screw steamers the demand continues fair; our present orders for chartering range from 20s. to 27s. 6d., according to the suitability of the steamers."

VI.—Foreign and Colonial Loans and Bank Rates of Discount.

On 1st January (1860), Baring, Brothers, and Co., and Glyn, Mills, and Co., brought forward, on behalf of the Canadian Government, a scheme for converting the various debts of the Province, amounting to 11,661,000l., into a consolidated 5 per cent. stock, irredeemable for twenty-five years. The scheme involved the raising of 2,800,000l., the whole of which was rapidly subscribed, the applications having reached 22,000,000l.

On 12th January, the Colony of Victoria announced that the amount of railway debentures to be issued by the colony in 1860, would be three millions sterling.

On 16th January appeared the manifesto of the Emperor of the French, announcing the Treaty of Commerce with England.

On 26th January, a Cape loan of 50,000l. in 6 per cent. colonial debentures was negotiated at 105½ @ 108½.

On 18th March Messrs. Rothschild introduced a Brazilian 4½ loan for 1,373,000l. at 88½.

On 10th April, tenders were opened for 2,650,000*l.* debentures 6 per cent. Colony of Victoria Railway Loan. The *minimum* price had been fixed at 105—but only 1,570,000*l.* was subscribed.

On 12th April occurred the singular circumstance of the withdrawal by Overend and Co., of 1,550,000*l.* in notes from the Bank of England, in consequence of their dissatisfaction with the bank rule against rediscounting for brokers. In consequence of this temporary withdrawal the bank note circulation stood in the official return at 23,470,000*l.*

On 20th April the fraud of 263,000*l.* by Pullinger, on his employers, the Union Bank of London, was announced.

On 24th June a Russian Loan of 8,000,000*l.* in 4½ stock at 82, was opened by Messrs. Baring, in London, and Messrs. Hope, in Amsterdam. About 5,000,000*l.* was ultimately subscribed.

On 3rd July was announced the failure of the firm of Streatfield, Laurence, and Mortimore, of London and Liverpool, leather merchants and factors, with 1¼ millions of liabilities. This failure led to the stoppage of nearly a dozen smaller firms, who all turned out to have been confederates with Streatfield and Co. in a long course of reckless dealing in accommodation bills. The aggregate liabilities of the whole group of firms was about 3,000,000*l.* In Streatfield's case the disclosures in the Bankruptcy Court are among the most extraordinary on record.

On 25th June the Bank of France opened subscriptions for 12,000,000*l.* of railway obligations.

On 5th August, subscriptions were opened at Turin for 6,000,000*l.* Sardinian Loan at 5 per cent. at 80½, and the applications amounted to 22,000,000*l.*

On 21st November, an arrangement was announced as having been effected by the Bank of France with the Bank of England, for a purchase by the latter of 2,000,000*l.* of silver in exchange for gold.

About seventy or eighty Joint Stock Companies of various kinds—mines, marine insurance, hotels, colonial banks, shipping companies, foreign railways, &c.—were brought forward in 1860, for which the proposed capital was about 18 millions sterling. It is probable that not more than one-half got beyond the preliminary stages. Besides these miscellaneous companies there was a large number of New Railways and extension of old lines.

There were eleven changes of the Bank of England *minimum* rate of Discount in the course of 1860. At the commencement of the year the rate was 2½ per cent. with 16 millions of *Total Bullion*, and 8½ millions of *Banking Reserve*. At the close of the year the rate was 6 per cent., with 12½ millions of *Total Bullion*, and 6½ millions of *Banking Reserve*.

The following Table (A) will show in outline the position of the

Bank of England at the dates of each of the *nineteen* changes of rate between 9th December, 1858, and 14th February, 1861 (2½ years):—

(A.)—Bank of England, 1859-60.—Alterations of Rate of Discount.

[The 0,000's at unit end are omitted, thus 18,92 = 18,920,000*l.*]

Dates.	Bank of England Minimum Rate of Discount.	Total Bullion.	Banking Reserve.	Circulation, including B. P. Bills.	Consols.
	Pr. ct. pr. ann	Mins. £	Mins. £	Mins. £	
1858.					
9 Dec.	2½	18,92	13,36	20,83	97½
1859.					
28 April.....	3½	17,64	10,18	22,70	95
5 May.....	4½	17,20	9,42	23,04	90
2 June.....	3½	17,76	11,14	21,88	93
9 ".....	3	17,96	11,30	21,88	94
14 July.....	2½	17,94	10,70	22,57	93
1860.					
19 Jan.	3	15,88	8,30	22,91	95
31 ".....	4	14,94	7,51	22,69	94½
29 March.....	4½	15,27	8,76	21,67	"
12 April.....	5	14,64	5,64	24,17	"
10 May.....	4½	15,37	7,97	22,61	95
24 ".....	4	15,84	9,09	21,92	"
8 Nov.....	4½	13,90	7,16	22,03	93
13 ".....	5	13,31	7,13	21,44	"
15 ".....	6				
29 ".....	5				
31 Dec.....	6	12,65	6,62	21,15	"
1861.					
7 Jan.	7	12,17	6,19	21,12	91½
14 Feb.	8	11,57	6,35	20,30	"

VII.—Course of Prices in 1860.

In the Appendix to this Paper will be found continuations of the tables given in the two former series of these annual reports (for 1858 and 1859) of the Prices of Commodities at the close of 1860, and of several former years. The first of the Appendix Tables (D) gives also the average prices for the *six years* 1845-50—that is for the six years *preceding* the virtual commencement of the influx of the New Gold. In former enquires I have employed the prices of 1st January, 1851, as a conditional datum from which to measure subsequent fluctuations, and I may repeat here my statement of last year to the effect that as regards a comparison between the *six years average* 1845-50, and the figures of 1st January, 1851, the facts when carefully ascertained, show that in fifteen leading cases the quotations were lower on 1st January, 1851, than on the average of the preceding six years.

In the following Tables (B) and (C), I have condensed into the smallest form I could manage, four comparisons, viz. :—

(a)	1st January, 1861	compared with	1st January, 1860
(b)	"	"	" 1859
(c)	"	"	1st July, 1857
(d)	"	"	Six years, '45-'50

The prices of 1st July, 1857, will be recognized as the exceedingly high range of quotations which preceded the financial collapse at the close of that year.

In examining the following Tables (B) and (C), care must be taken to distinguish between those cases in which the rise or fall has been considerable, and those in which it is only slight. The details in Tables (D) and (E) in the Appendix, will supply the needful particulars :—

(B.)—Prices of Commodities in London, &c., at 1st January, 1861, compared with 1st January, 1860, and 1st January, 1859.*

(a) 1st January, 1861,			(b) 1st January, 1861,		
Higher	Same, or nearly so,	Lower	Higher	Same, or nearly so,	Lower.
than 1st January, 1860.			than 1st January, 1859.		
9	11	6	17	4	6
Coffee Butter *Wheat *Butchers' Meat *Raw Cotton *Silk Hemp Dyes Oils	Sugar Rum Flax Wool Timber *Tallow Saltpetre Iron Lead *Cotton Yarn " Cloth	*Tea Tobacco Leather Copper Steel Tin Total Bank Note Circulation of Great Britain, 3 millions lower	Coffee Sugar *Tea Butter *Wheat *Butchers' Meat *Raw Cotton *Silk Flax Hemp Oils Timber Tallow Leather Tin Cotton Yarn " Cloth	Rum Wool Ashes Lead	Tobacco Dyes Saltpetre Copper Iron Steel Total Bank Note Circulation of Great Britain, 2 millions lower

* The (*) indicates that the articles (e.g. Tea) are subject to some special disturbing influence.

(C.)—Prices of Commodities in London, &c., at 1st January, 1861, compared with 1st July, 1857, and with the Average Prices of the Six Years, 1845-50.

(c) 1st January, 1861,			(d) 1st January, 1861,		
Higher	Same, or nearly so,	Lower	Higher	Same, or nearly so,	Lower.
than 1st July, 1857.			than Six Years, 1845-50.		
4	6	18	22	3	2
Butter Butchers' Meat Saltpetre Cotton Cloth	Flax Wool Indigo Oils Timber Cotton Yarn	Coffee Sugar Rum Tea Tobacco Wheat Cotton Wool Silk Hemp Dyes Tallow Leather Ashes Copper Iron Lead Steel Tin	Coffee Rum Tea Tobacco Butter Butchers' Meat Raw Cotton Silk Flax Wool Dyes Oils Tallow Leather Leather Saltpetre Ashes Copper Lead Steel Tin Cotton Yarn " Cloth	Wheat Hemp Timber	Sugar Iron
	Total Bank Note Circulation of Great Britain nearly the same			Total Bank Note Circulation of Great Britain very nearly the same	

In considering these tables it will scarcely escape notice that the variations in the amount of the outstanding Bank Note Circulation do not bear any relation, either of date or degree, to the large fluctuation of prices. I have also given in the Appendix in Tables (K) and (L). condensed returns for the last year or two of the Bank of England, the Bank of France, and the American Banks.

The production of new gold in California and Australia, during the twelve years 1849-60 (both inclusive), may be stated at 300 Millions sterling, equal to 50 per cent. upon the total stock of, say, 600 millions sterling of gold, existing in various forms in Europe and America in 1848.

Speaking in general terms, and reserving to myself the right of correction, it is probable that these 300 Millions of New Gold may be accounted for as follows :—

	Mins.	Mins.
Addition to Gold circulation of United Kingdom	40	
" " France	100	
" " United States.....	80	
	—	220
Employed and absorbed in—		
Australia	20	
California	20	
Turkey and East	20	
Brazil, Egypt, Spain, Portugal, &c.	20	
	—	80
		300
		—

As regards the new gold fields of *British Columbia*, discovered in the summer of 1858, it does not appear that, at all events, at present the supplies from thence will be large,—for the total produce for the $2\frac{1}{2}$ years, to the close of 1860, is supposed to amount to not 700,000*l*.

On the other hand the yield of the *New Silver Mines* in California, the discovery of which was announced at the close of 1859, would seem to have already attained large dimensions. Recent statements represent the Washoe silver mines (California), as affording results "which exceed, both in extent and richness, all previous "mining experience—not excluding the silver mines of Mexico and "Peru."

I shall not attempt in this place to enter into any general discussion of the Course of Prices during 1860 and the preceding years. I would say, merely, that the leading feature in the Trade of 1860, as of the years preceding it, has been a scarcity of many perhaps of most, kinds of Raw Materials of manufacture, and of important articles of general consumption. Bad seasons, wars, political distrust, distempers, or other disturbing causes have operated almost without intermission during the last eight years, to diminish or interrupt former supplies and to impede efforts for extended production.

In those instances, however, in which there has been a singular immunity from any serious form of these interruptions, viz.: *Sugar*, *Iron*, and *Timber*—articles among the most important in the entire catalogue—we find that the prices at the present time are, as regards Sugar and Iron, *lower* than, and as regards Timber the *same* as, during the six years 1845-50. For these three articles there has been, perhaps, the most rapid extension of demand, but then there have been facilities for a corresponding extension of supply.

VIII.—Explanatory Notes as regards the following APPENDIX OF TABLES.

The first and principal Table (D) in this Appendix exhibits the Wholesale Prices, in London and Manchester, of forty-one leading commodities at various periods from the opening of 1847 to the close of 1859. In those cases where Import Duties apply the prices *in bond* are of course given. The first line of the table gives the *average price* of several articles for the *Six Years* 1845-50, and is now published for the first time. It is followed by six quotations for dates subsequent to 1850. Care has been taken to compile the figures from the same source, and in the same manner throughout. The authority employed has been the weekly return of prices given in the *Economist* newspaper. The results for the six years, 1845-50, is the average of the quotations appearing on the first days of January, April, July, and October, in each year. The articles included in the table, and the arrangement of the table itself, correspond with the analogous observations which the late Mr. Tooke and myself were led to adopt in the fifth and sixth volumes of the *History of Prices* (published early in 1857), as on the whole the best mode of arriving at a definite view of the facts relating to the course of prices.

The second Table (E) reduces into more manageable form the results of the table of details which precede it. In (E) all the variations are measured from a fixed basis of 100; and as explained at the foot of the table, it is not difficult, by the aid of this method, to simplify to a large extent the questions to be further investigated.

In Tables (F) (G) are given the *Imports* and the *Exports* of leading commodities in each of six years, from 1845 to 1860, with the view of exhibiting that in some of the most important articles (*e. g.* sugar) the imports have been nearly doubled, and in all have largely increased. This large and rapid increase of demand is obviously a most important element to be considered in relation to the course of prices.

Table (H) gives the exports of Gold and Silver to India and the East, 1851-9.

In Table (I) a statement is given of the average annual quotations of the Foreign Exchange at London on Paris, Hamburg, and Amsterdam; and at Calcutta on London. It also gives the price of standard Silver in London. The quotations are obtained from the official weekly list in the *Economist*, and from the Appendices to the Reports of the Banking Committees of 1848 and 1857-8. The expression of the annual result is the average of two quotations in each month of each year.

The Tables (K, L, M, and N) give returns of the Bank of France, American Banks, Country Banks, and Bank of England.

The series of tables of which these Reports and Appendices are continuations, were affirmed as correct in principle by the International Statistical Congress of 1860.

(D.)—Wholesale Prices of Commodities in LONDON and MANCHESTER.—Average of SIX YEARS, 1845-50;—and at Seven Dates, 1851-60.

DATES.	(I.) COLONIAL AND TROPICAL PRODUCE (FOOD).							
	1	2		3	4	5	6	7
	Coffee.	Sugar.		Rum.	Tea.	Tobacco.	Butter.	
	Jamaica, Fine Ord. to Mid., (bond) pr. cwt.	Brit. Plan. Yellow, (bond) pr. cwt.	Avgc. Gaz. Price, B. P. and E. I., (bond) pr. cwt.	Jamaica, 15 c. 15. 0 p., (bond) pr. cwt.	Congou, Com. to Mid., (bond) pr. lb.	Virginian Leaf, (bond) pr. lb.	Water.	
	s. s.	s. s.	s. d.	d. d.	d.	d.	s.	
'45-'50, {Avgc. six Yrs.}	44 @ 54	28 @ 30	29 -	34 @ 38	9½	4½	81	
'51-1 Jan.....	53 ,, 58	26 ,, 28	29 9	30 ,, 32	12	4½ @ 10	89	
'53-1 July.....	50 ,, 58	20 ,, 23	24 8	32 ,, 34	12	2½ ,, 7½	84	
'57-1 ,,	68 ,, 80	40 ,, 44	45 9	52 ,, 56	15	8 ,, 11	103	
'58-1 Jan.....	50 ,, 62	23 ,, 26	26 7	44 ,, 48	13	7½ ,, 10	110	
'59-1 ,,	56 ,, 71	22 ,, 26	27 -	36 ,, 40	11	5 ,, 10	105	
'60-1 ,,	58 ,, 71	22 ,, 26	24 8	38 ,, 42	15	5 ,, 8½	105	
'61-1 ,,	63 ,, 70	24 ,, 28	29 2	36 ,, 40	14	4 ,, 8	111	

DATES.	(II.) WHEAT (ENG. AND W.):—AND BUTCHERS' MEAT (NEWGATE MKT.)							
	8	9		10		11	12	13
	Wheat.	Beef.		Mutton.		Pork.		
	Gazette Monthly Average, Pr. imp. qr.	Inferior Midlg. Pr. 8 lbs.	Prime Large, Pr. 8 lbs.	Middling, Pr. 8 lbs.	Prime, Pr. 8 lbs.	Large, Pr. 8 lbs.		
	s. d.	d. d.	d. d.	d. d.	d. d.	d. d.		
'45-'50, {Avgc. six Yrs.}	53 -	34 @ 36	38 @ 40	42 @ 46	48 @ 50	39 @ 40		
'51-1 Jan.....	38 1	28 ,, 30	32 ,, 36	34 ,, 42	44 ,, 46	30 ,, 31		
'53-1 July.....	44 11	40 ,, 42	42 ,, 44	46 ,, 50	52 ,, 56	40 ,, 41		
'57-1 ,,	63 4	36 ,, 40	42 ,, 46	40 ,, 46	48 ,, 52	42 ,, 43		
'58-1 Jan.....	48 7	42 ,, 44	46 ,, 50	42 ,, 48	50 ,, 58	42 ,, 43		
'59-1 ,,	40 6	42 ,, 44	46 ,, 48	44 ,, 50	52 ,, 56	36 ,, 37		
'60-1 ,,	44 2	36 ,, 40	42 ,, 48	44 ,, 50	52 ,, 54	42 ,, 43		
'61-1 ,,	53 7	40 ,, 48	50 ,, 52	48 ,, 54	56 ,, 60	48 ,, 49		

(D.)—Wholesale Prices—Contd.

DATES.	(III.) RAW MATERIALS OF MANUFACTURE.								
	14	15	16	17	18 19 20			21	22
	Cotton, Raw.	Silk, Raw.	Flax.	Hemp.	Sheep's Wool.			Dyes.	
	Upland Fair.	Cosimby.	Friesland.	St. Petersb. Clean.	Eng. South-Down.	South Australia Lambs.	South Australia Locks.	Logwood, Jamca.	Indigo, Bengal.
	Pr. lb.	Pr. lb.	Pr. ton.	Pr. ton.	P. 240 lbs.	Pr. lb.	Pr. lb.	Pr. ton.	Pr. lb.
	d.	s. s.	£ £	£	£	d. d.	d. d.	s. s.	s. d. s. d.
'45-'50, {Avgc. six Yrs.}	1½	0 @ 14	41 @ 47	32	13	12 @ 22	7 @ 12	87 @ 93	1 9 @ 5 11
'51-1 Jan.....	7½	9 ,, 17	38 ,, 46	30	14	18	10 ,, 14	70 ,, 80	3 - ,, 6 10
'53-1 July.....	6½	12 ,, 15	42 ,, 55	35½	19½	17	7 ,, 17	105 ,, 119	4 9 ,, 7 8
'57-1 ,,	8½	17 ,, 30	50 ,, 65	35	19	18 @ 26	13 ,, 19	105	1 8 ,, 7 8
'58-1 Jan.....	6½	14 ,, 22	,,	29	13	16 ,, 21	7 ,, 16	,,	2 6 ,, 10 -
'59-1 ,,	5½	12 ,, 20	,,	29	19	18 ,, 25	5 ,, 16	,,	1 - ,, 8 -
'60-1 ,,	5½	12 ,, 23	65	28	19	22 ,, 25	7 ,, 13	80 @ 85	2 - ,, 8 8
'61-1 ,,	7	15 ,, 22	65	34	19	19 ,, 25	8 ,, 13	96	1 - ,, 8 6

DATES.	(III.) RAW MATERIALS—Continued.									
	23 24 25			26 27		28	29	30	31	
	Oils.			Timber.		Tallow.	Leather.	Saltpetre.	Ashes.	
	Seal.	Olive Gallipoli.	Palm.	Dantzie and Memel.	Canadian Yellow Pine.	St. Petersburgh 1st Y. C.	English Butts, 28-36.	English Refined.	Canadn. Pearl.	
	P. 252 gls.	Pr. ton.	Pr. ton.	Pr. load.	Pr. load.	Pr. cwt.	Pr. lb.	Pr. cwt.	Pr. cwt.	
	£	£	£	s. s.	s. s.	s.	d. d.	s. s.	s.	
'45-'50, {Avgc. six Yrs.}	31½	44	32	71 @ 81	65 @ 71	44	13 @ 23	26 @ 28	31	
'51-1 Jan.	37	43	29	60 ,, 70	55 ,, 60	38	12 ,, 23	27 ,, 29	30	
'53-1 July.....	33½	71	36	72 ,, 80	70 ,, 85	49	14 ,, 22	24 ,, 28	28	
'57-1 ,,	46	58	47	57 ,, 80	75 ,, 85	65	24 ,, 30	38	45	
'58-1 Jan.....	39	51	40	57 ,, 85	70 ,, 75	52	20 ,, 27	43	36	
'59-1 ,,	37	50	40	55 ,, 70	65 ,, 70	51	12 ,, 30	45	33	
'60-1 ,,	33	57	46	55 ,, 82	70 ,, 75	58	18 ,, 32	40	33	
'61-1 ,,	40	60	47	60 ,, 85	70 ,, 75	60	17 ,, 30	42	34	

(D.)—Wholesale Prices—Contd.

DATES.	(iv.) METALS.						(v.) MANCHESTER MARKETS.					
	32	33	34	35	36	37	38	39		40	41	
	Copper Tough Cake. Pr. ton.	Iron. British Bars. Pr. ton.		Swedish (Bond). Pr. ton.	Lead. English Pigs. Pr. ton.	Steel. Swedish Kegs. Pr. ton.	Tin. English Bars in Barrels. Pr. ton.	Yarn. Mule 40, Fair, Endqual.	Cotton Cloth. Printers' 26 in 66 Reeds. 27 yards, 4 lb. 2 oz.		Gold-end Shirtings, 40 in 66 Reeds. 37½ yards, 8 lb. 12 oz.	Raw Cotton. Upland, Good, Fair. Pr. lb.
'45-'50, {Avge. six Yrs.}	£ 88	£ 8	£ 11½	£ 17½	£ 15½	£ 85½	d. 9½	s. 4	d. 7½	s. 8	d. 10	d. 5½
'51-1 Jan.....	84	6	11½	17½	15	84	12½	5	2	10	10	8
'53-1 July.....	107	9½	11½	24½	17	108	10½	5	-	9	6	6½
'57-1 ,,	117	8½	16	25	21	143	12½	5	4½	9	10½	8½
'58-1 Jan.....	107	7½	15	23	22	109	10½	4	7½	8	7½	6½
'59-1 ,,	107	7	13	22	20	124	12½	5	4½	9	7½	7½
'60-1 ,,	112	6½	11½	22	19	139	12½	6	1½	10	7½	7½
'61-1 ,,	102	6½	,,	,,	17½	137	,,	6	-	11	-	7½

DATES.	42 Bank Note Circulation.			45 Rate of Interest.		47 Reserve of Bank of England.	
	Bank of England.	Country Banks, Gt. Britain.	Total.	Bank of England, Minn.	Lombard Street.	Total Bullion.	Banking Department.
	Mlns. £	Mlns. £	Mlns. £	P. cnt. p. ann.	P. cnt. p. ann.	Mlns. £	Mlns. £
'45-'50, {Avge. six Yrs.}	20.4	10.3	30.7	3½	3½	14.4	8.50
'51-1 Jan.....	20.3	9.5	29.8	3	2½	14.6	9.0
'53-1 July.....	24.2	10.5	34.7	3½	3½-4	18.0	8.5
'57-1 ,,	20.5	10.7	31.2	5½	5½-¾	11.6	6.3
'58-1 Jan.....	20.6	9.4	30.0	6	4-5	12.6	7.6
'59-1 ,,	21.7	10.4	32.0	2½	2-2½	19.1	12.7
'60-1 ,,	22.6	11.0	33.6	2½	,,	17.0	10.3
'61-1 ,,	20.5	11.0	30.5	6	6½	12.6	6.6

(E.)—WHOLESALE PRICES, 1845-60.—PROPORTIONATE RESULTS deduced from the preceding Table (A.) on the Basis of representing by the Number 100 the AVERAGE PRICES of the Six Years 1845-50.

DATES.	Coffee, 1.	Sugar, 2-3.	Tea, 5.	Tobacco, 6.	Wheat, 8.	Butchers' Meat, 9-13.	Cotton Wool (at London,) 14.	Silk, Raw, 15.	Flax and Hemp, 16-17.	Sheep's Wool, 18-20.	Indigo, 23.
'45-'50, {Avge. six Yrs.}	100	100	100	100	100	100	100	100	100	100	100
'51-1 Jan.....	113	91	128	166	71	87	143	112	95	110	125
'53-1 July.....	110	80	128	111	85	108	118	118	110	120	162
'57-1 ,,	151	152	162	211	119	104	150	203	120	142	125
'58-1 Jan.....	113	83	140	200	92	111	114	156	113	107	150
'59-1 ,,	130	85	119	166	77	109	104	138	113	127	111
'60-1 ,,	131	83	162	150	83	107	93	140	122	130	130
'61-1 ,,	135	89	151	133	100	118	132	160	128	130	106

DATES.	Oils, 23-25.	Timber, 26-7.	Tallow, 28.	Leather, 29.	Copper, 33.	Iron, 34-5.	Lead, 36.	Tin, 38.	Cotton Wool, Upland, Good, Ord. Fair at Much.	Cotton Yarn.	Cotton Cloth.	Total Note Circulation Great Britain.
'45-'50, {Avge. six Yrs.}	100	100	100	100	100	100	100	100	100	100	100	100
'51-1 Jan.....	101	84	86	100	95	90	100	98	140	127	118	97
'53-1 July.....	130	107	111	100	121	105	140	114	110	105	107	113
'57-1 ,,	141	102	147	150	133	125	143	166	150	126	113	101
'58-1 Jan.....	121	100	118	130	121	110	131	115	120	112	99	98
'59-1 ,,	118	91	116	116	121	100	125	145	120	124	112	104
'60-1 ,,	127	97	131	136	127	90	125	151	128	125	124	109
'61-1 ,,	137	100	136	128	115	90	125	149	130	125	125	100

The construction of this Table (E) will be easily understood. For example—the Col. *Wheat*, represents the fluctuations in the Gazette price of *Wheat*, according to the actual prices given in (D), Col. 8. The price of *Wheat*, in 1845-50, is represented in (E) by 100—and the prices of the six subsequent dates by corresponding additions to or abatements from 100. Thus, at 1st July, '57, the 100 had become 119. To arrive at the *per centage* variation from year to year, it is obvious that the *differences* must be measured, not against 100, but against the number placed against the first of the years compared. Thus, the *fall* in the prices of *Wheat* between 1st July, '57, and 1st Jan., '58, was not 27 per cent.—but 22 per cent.—or the proportion borne by 119 to a fall of 27.

(F.)—IMPORTS.—(Quantities).—UNITED KINGDOM, 1845-60.—Leading Articles of Consumption.

[The 0,000's at unit end omitted—thus 5,82 = 5,820,000.]

Year.	Raw Sugar.	Tea.	Coffee.	Wine.	Tobacco.	Timber.	Oils.
	(Imp'd.)	(Imp'd.)	(Imp'd.)	(Imp'd.)	(Imp'd.)	(Imp'd.)	
	Cwts.	lbs.	lbs.	Gals.	lbs.	Loads.	Cwts. & lbs.
1845.....	5,82	53,15	50,37	8,47	32,94	1,95	,58
'50.....	6,29	50,51	50,80	9,30	35,16	1,66	,58
1853.....	7,28	70,74	55,63	11,03	40,67	2,52	,84
1858.....	9,01	75,43	60,70	5,79	59,64	2,22	1,02
'59.....	9,10	75,08	65,35	8,19	48,60	2,62	,92
1860.....	8,81	88,95	82,77	12,48	48,94	2,72	1,05

Year.	Hemp.	Hides.	Raw Silk.	Cotton Wool.	Sheep's Wool.	Tallow.	Seeds.— Flax, Lin, and Rape.
	Cwts.	Cwts.	lbs.	lbs.	lbs.	Cwts.	Qrs.
1845.....	,93	,72	4,35	721,98	76,81	1,19	,70
'50.....	1,05	,61	4,94	663,57	74,32	1,24	,71
1853.....	1,24	,81	6,48	895,28	119,40	1,17	1,11
1858.....	1,62	,76	6,23	1,034,34	126,74	1,23	1,23
'59.....	2,15	,86	9,92	1,232,00	133,37	1,07	1,68
1860.....	1,61	,85	9,18	1,390,93	148,40	1,43	1,60

(G.)—RE-EXPORTS of FOREIGN and COLONIAL Produce from United Kingdom, 1845-60.

Year.	Sugar.	Tea.	Coffee.	Wine.	Tobacco.	Oils.	Raw Silk.	Cotton Wool.	Sheep's Wool.
	Cwts.	lbs.	lbs.	Gals.	lbs.	Cwts.	lbs.	lbs.	lbs.
1845.....	,62	4,05	19,23	1,61	8,69	,07	,29	,38	2,61
'50.....	,37	5,01	12,17	1,74	7,25	,12	,56	,91	14,05
1853.....	,25	4,83	26,65	2,47	9,18	,20	,43	1,32	11,70
1858.....	,30	7,25	28,76	2,32	9,25	,28	2,31	1,33	26,59
'59.....	,21	6,42	29,58	2,13	11,16	,29	2,15	1,56	28,83
1860.....	,29	8,39	45,66	2,27	8,37	,32	3,15	2,23	30,64

(H.)—GOLD and SILVER, 1851-60.—Exports to INDIA, CHINA, EGYPT, from UNITED KINGDOM, and from the Ports of the MEDITERRANEAN according to Mr. Low's Circular of January, 1861.

Years.	Gold.			Silver.		
	From Gt. Britain.	From Medtn. Ports.	Total.	From Gt. Britain.	From Medtn. Ports.	Total.
	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £
1851.....	,10	—	,10	1,72	—	1,72
'52.....	,92	—	,92	2,63	—	2,63
'53.....	,88	,09	,97	4,71	,85	5,56
1854.....	1,17	,05	1,22	3,13	1,45	4,58
'55.....	,95	,24	1,19	6,11	1,52	7,63
'56.....	,41	,07	,48	12,12	1,99	14,11
1857.....	,27	,26	,53	16,80	3,35	20,15
'58.....	,17	,16	,33	4,78	,91	5,69
'59.....	,79	,14	,93	14,83	1,52	16,35
'60.....	1,61	,76	2,37	7,81	2,76	10,57
Totals....	7,27	1,79	9,08	74,64	14,35	89,00
Average....	,73	,18	,91	7,46	1,43	8,90

The Exports of Silver to the Indian Government were 6½ Millions in 1859, and 1 Million in 1860. Messrs. Pixley, Abell, and Langley, Bullion Brokers, apportion the Export of Silver from Great Britain in each of the Five Years 1855-'60, as follows:—

Year.	India.	China.	Straits.	Total.
1855.....	4,74	1,37	,31	6,43
'56.....	8,38	3,16	,56	12,11
'57.....	11,38	4,47	,87	16,73
'58.....	3,30	1,35	,10	4,75
'59.....	11,16	3,37	,29	14,82
'60.....	4,38	3,65	,43	8,48

(I.)—FOREIGN EXCHANGES, 1841-60.—ANNUAL AVERAGE RATES, London on Paris, Hamburg, and Amsterdam.—Calcutta on London—and Price of Standard SILVER Bars in London.

Years.	Paris. 8 m. dt.	Hamburg. 3 m. dt.	Amsterdam. 3 m. dt.	Calcutta on London. 6 m. dt.	Standard Silver (bars), in London.
1841.....	25·65	13· 9½	12 4	d. 23	per oz. 60
'42.....	·80	·11½	·5	24	59½
'43.....	·85	·13½	·5	23½	„ ¼
'44.....	·75	·11½	·3¾	22	„ ½
'45.....	·92	·13½	·7½	22½	„ ½
	25·80	13·12	12·5	23	59½
1846.....	25·90	13·12½	12·7	23	59½
'47.....	·60	·12½	·4½	22½	„ ½
'48.....	·90	·13	·3½	22½	„ ½
'49.....	·80	·13	·3¾	23	„ ¾
'50.....	·40	·11	·1½	24¾	60
	25·72	13·12½	12·4	23½	59½
1851.....	25·25	13·8	11·18	24½	61
'52.....	·50	·9½	12·0	24½	60¾
'53.....	·30	·7½	11·18½	25	61½
'54.....	·35	·6	·17	24½	„ ½
'55.....	·50	·8	·19	25½	„ ½
	25·38	13·8	11·18	25	61½
1856.....	25·70	13·9	12·0	26	61½
'57.....	·70	·9	12·0	„ ¼	„ ½
'58.....	·35	·7½	11·17½	25	„ ½
'59.....	·35	·5½	·16	24¾	„ ½
'60.....	·42	·6	12·0	„ ¼	„ ¼
	25·50	13·7¾	11·19	25½	61½

(K.)—BANK OF FRANCE, 1857-60.—Abstract of Official Returns.—25 francs = £.

I.—LIABILITIES (Passif).

1 DATES.	2 Billets to Bearer. (Circulation.)			3 Billets to Order. (Bank Post Bills.)			4 Current Accounts. (Deposits.)			12 Other Lia- bilities.	13 Total Lia- bilities.	
	Paris.	Branch.	Total.	Paris.	Récé- pissés.	Total.	Trea- sury.	Paris.	Branch.			Total.
1857.												
Jan. 8....	21·76	2·73	24·49	·21	·14	·35	3·06	5·55	·90	9·51	5·08	39·43
April 9....	21·43	2·35	23·78	·20	·14	·34	2·75	4·62	·96	8·33	5·12	37·57
July 9....	22·12	2·22	24·34	·22	·17	·39	4·56	5·59	·99	11·14	9·02	44·89
Oct. 8....	22·20	2·02	24·22	·27	·18	·45	3·50	5·51	·97	9·98	9·11	43·76
1858.												
Jan. 14....	21·39	1·87	23·26	·23	·12	·35	2·51	5·84	1·16	9·51	9·02	42·14
April 8....	21·79	1·64	23·43	·26	·11	·37	3·72	5·23	1·11	10·06	9·07	42·93
July 8....	23·69	1·63	25·32	·25	·18	·43	4·35	5·66	1·13	11·14	9·04	45·93
Oct. 14....	—	—	27·62	·30	·32	·62	4·70	5·61	1·13	11·44	8·94	48·62
1859.												
Jan. 13..	—	—	30·19	·26	·24	·50	2·84	7·35	1·21	11·40	8·94	51·03
April 14..	—	—	29·21	·26	·36	·62	3·05	8·39	1·13	12·57	8·92	51·32
May 12..	—	—	29·47	·29	·50	·79	3·78	10·54	1·49	15·81	9·02	55·09
June 9..	—	—	26·77	·32	·43	·75	8·16	12·04	1·48	21·68	9·09	58·29
July 14..	—	—	29·36	·26	·45	·71	7·05	10·23	1·10	18·38	9·02	57·47
Aug. 11..	—	—	29·43	·24	·39	·63	7·15	7·25	1·26	15·66	8·91	54·63
Sept. 8..	—	—	28·02	·26	·36	·62	8·20	7·15	1·22	16·57	8·99	54·20
Oct. 13..	—	—	28·08	·26	·34	·60	7·46	7·31	1·20	15·97	9·06	53·71
Nov. 10..	—	—	28·24	·22	·35	·57	7·98	6·98	1·19	16·15	9·19	54·15
Dec. 8..	—	—	27·14	·29	·28	·57	9·54	5·89	1·30	16·73	9·25	53·69
1860.												
Jan. 12..	—	—	29·93	·28	·28	·56	10·71	6·28	1·24	18·23	9·08	57·80
Feb. 9..	—	—	29·96	·19	·30	·49	9·55	5·87	1·52	16·94	8·86	56·25
Mch. 8..	—	—	28·39	·24	·35	·59	8·83	7·14	1·50	17·47	8·88	55·33
April 12..	—	—	29·87	·29	·41	·70	6·70	7·07	1·32	15·09	8·87	54·53
May 10..	—	—	30·58	·31	·46	·77	5·06	7·00	1·45	13·51	9·14	54·00
June 14..	—	—	29·76	·29	·46	·75	5·05	8·39	1·57	15·01	9·10	54·62
July 12..	—	—	31·50	·29	·45	·74	5·10	7·91	1·31	14·32	9·13	55·69
Aug. 9..	—	—	30·40	·33	·44	·77	5·29	8·88	1·40	15·57	8·91	55·65
Sept. 13..	—	—	29·90	·30	·43	·73	5·38	8·15	1·53	15·06	8·89	54·58
Oct. 11..	—	—	29·94	·31	·47	·78	4·75	7·19	1·33	13·27	9·18	53·17
Nov. 8..	—	—	30·30	·26	·41	·67	5·33	7·03	1·34	13·70	9·21	53·88
Dec. 13..	—	—	29·88	·42	·40	·82	5·36	6·33	1·28	12·97	9·20	53·87

The 000's at Unit end are omitted—thus 29,83 = £29,830,000.

The Minimum rate of discount of Bank of France was fixed on 4th Aug., 1859, @ 3½ per cent.; 12th Nov., 1860, @ 4½ per cent.; 2nd Jan., 1861, @ 5½ per cent.

(K.)—BANK OF FRANCE, 1857-60.—Abstract of Official Returns—Contd.

II.—ASSETS (Actif).

14 DATES.	15 Coin and Bullion.			18 Portfolio. (Discounts.)			21 Ad- vances on Ingots.	22 Ad- vances on Public Stocks.	23 Ad- vances on Shares.	24 Other Assets.	25 Total Assets.
	16 Coin and Bullion.			19 Portfolio. (Discounts.)							
	Paris.	Branch.	Total.	Paris.	Branch.	Total.					
1857.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £
Jan. 8....	2.88	4.80	7.68	11.22	11.40	22.62	.15	1.24	.93	6.81	39.53
April 9....	4.24	5.16	9.40	10.53	10.22	20.75	.11	1.17	.78	5.36	37.57
July 9....	4.39	6.10	10.49	12.02	11.37	23.39	.09	1.17	.80	8.95	44.89
Oct. 8....	4.28	4.74	9.02	12.66	11.69	24.35	.14	1.19	1.13	7.92	43.76
1858.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £
Jan. 14....	2.84	7.22	10.06	11.68	10.07	21.75	.18	1.26	1.96	6.93	42.74
April 8....	6.35	8.96	15.31	8.03	8.62	16.65	.12	1.41	3.37	6.07	42.93
July 8....	9.31	11.81	21.12	7.31	8.43	15.74	.12	1.54	2.34	5.07	45.93
Oct. 14....	10.13	11.84	21.97	7.66	8.47	16.13	.10	2.50	2.73	5.19	48.62
1859.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £
Jan. 13..	9.01	12.02	21.03	8.98	9.45	18.43	.07	2.26	4.13	5.11	51.03
April 14..	9.15	12.60	21.75	8.73	9.07	17.80	.03	1.60	5.03	5.11	51.33
May 12..	7.00	13.73	20.73	10.46	10.00	20.46	.03	1.77	5.82	6.27	55.09
June 9..	6.70	16.15	22.85	10.58	10.84	21.42	.04	1.76	6.13	6.09	58.23
July 14..	8.40	14.00	22.40	9.81	11.48	21.29	.04	1.70	6.02	6.02	57.47
Aug. 11..	10.96	14.15	25.11	8.31	10.23	18.54	.03	1.62	3.28	6.05	54.63
Sept. 8..	11.18	14.60	25.78	8.06	9.59	17.65	.04	1.60	3.21	5.92	54.29
Oct. 13..	8.97	14.71	23.68	8.68	10.33	19.01	.04	1.68	3.31	5.99	53.71
Nov. 10..	8.47	14.47	22.94	9.30	10.89	20.19	.03	1.71	3.42	5.86	54.13
Dec. 8..	8.23	14.94	23.17	8.85	10.72	19.57	.02	1.71	3.37	5.85	53.63
1860.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £
Jan. 12..	7.34	14.03	21.37	9.96	11.42	21.38	.03	1.76	3.40	9.86	57.69
Feb. 9..	6.93	14.66	21.59	10.06	10.62	20.68	.02	1.69	3.42	8.86	56.23
Mch. 8..	7.06	14.72	21.78	9.51	10.03	19.54	.05	1.66	3.39	8.91	55.33
April 12..	7.12	14.29	21.41	9.32	9.85	19.17	.09	1.61	3.33	8.92	54.53
May 10..	6.69	14.20	20.89	9.05	9.69	18.74	.11	1.58	3.78	8.90	54.00
June 14..	6.93	15.13	22.06	8.01	9.50	17.51	.13	1.62	4.33	8.97	54.62
July 12..	5.67	14.92	20.59	8.87	10.81	19.68	.20	1.61	4.88	8.73	55.69
Aug. 9..	6.52	15.45	21.97	9.11	10.99	20.10	.18	1.66	2.10	8.64	55.65
Sept. 13..	5.98	15.26	21.24	8.65	10.99	19.64	.19	1.66	3.13	8.72	54.53
Oct. 11..	4.69	13.71	18.40	9.53	11.28	20.81	.31	1.68	3.20	8.77	53.17
Nov. 8..	4.60	12.78	17.38	10.46	12.07	22.53	.28	1.72	3.26	8.71	53.63
Dec. 13..	4.94	12.32	17.26	9.79	11.80	21.59	.29	1.56	3.15	9.02	52.67

The 000's at Unit end are omitted—thus 29.88 = £29,880,000.

(L.)—BANKS in BOSTON and NEW YORK, 1859-60.
Monthly averages deduced from Weekly Official Returns. \$5 = £.

Averages of Months of	Boston.				New York.				Rates of Discount in New York on Prime endorsed 60 d. Bills. Pr. ct. pr. ann.
	Liabilities.		Assets.		Liabilities.		Assets.		
	Circl.	Depts.	Loans.	Specie.	Circl.	Depts.	Loans.	Specie.	
1859.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	
Jan.	1.32	4.25	11.95	1.56	1.52	22.94	25.85	5.74	
Feb.	1.26	4.01	11.79	1.32	1.56	22.12	25.64	5.21	
March	1.06	3.94	11.65	1.26	1.60	21.55	25.33	5.12	4½ @ 5½
April	1.21	4.07	11.79	1.38	1.56	22.20	25.64	5.36	
May	1.37	4.28	11.65	1.30	1.66	22.37	25.85	5.17	5 ,, 5½
June	1.38	4.27	11.60	1.36	1.69	22.42	25.75	5.08	6 ,, 6½
July	1.37	4.04	11.60	1.30	1.66	19.93	24.57	4.53	6½ ,, 7
Aug.	1.37	4.19	11.62	1.32	1.70	21.57	25.06	4.93	
Sept.	1.40	3.77	11.74	1.00	1.65	19.21	24.14	4.41	6½ ,, 7½
Oct.	1.29	3.54	11.61	.97	1.67	18.07	23.61	4.14	6½ ,, 7½
Nov.	1.31	3.66	11.73	1.03	1.68	18.67	23.76	4.27	6 ,, 7
Dec.	1.33	3.66	11.69	1.00	1.67	18.65	23.84	4.27	
Are. Year	1.39	3.89	11.72	1.10	1.68	18.60	23.53	4.02	6½ ,, 7
1860.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	
Jan.	1.37	3.91	11.85	1.02	1.68	19.42	24.21	3.94	6½ ,, 7½
Feb.	1.32	3.71	11.93	.94	1.67	19.96	24.73	3.97	7 ,, 7½
March	1.36	3.83	11.83	1.02	1.68	15.99	24.16	3.98	
April	1.32	3.94	11.73	1.18	1.65	19.60	24.70	4.64	
May	1.29	3.55	11.96	.87	1.61	19.74	24.75	3.79	8½ ,, 9
June	1.26	3.53	11.53	.89	1.61	19.93	24.80	3.79	7 ,, 7½
July	1.27	3.72	12.01	1.07	1.67	21.23	25.43	4.05	6 ,, 7
Aug.	1.27	3.60	11.83	.94	1.63	20.30	24.99	4.14	
Sept.	1.42	4.02	12.16	1.25	1.76	21.48	25.80	4.63	3½ ,, 6
Oct.	1.40	4.13	12.31	1.25	1.82	21.36	25.19	4.59	5 ,, 6
Nov.	1.41	4.12	12.53	1.25	1.76	20.67	25.15	4.73	5 ,, 6
Dec.	1.41	4.09	12.33	1.25	1.78	21.17	25.38	4.65	
Are. Year	1.47	4.05	12.94	1.13	1.75	21.15	25.59	4.64	4½ ,, 5
1860.	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	Mlms. £	
Jan.	1.40	3.82	12.92	1.02	1.83	21.12	26.02	4.24	5 ,, 6½
Feb.	1.41	3.85	12.50	1.06	1.89	20.29	24.50	3.85	6½ ,, 7½
March	1.43	3.90	12.79	1.07	1.82	20.85	25.37	4.24	
April	1.54	4.09	12.87	1.05	1.86	20.76	24.50	4.27	6½ ,, 7
May	—	—	—	—	1.86	15.41	24.83	3.96	6½ ,, 9
June	—	—	—	—	1.71	17.23	26.19	4.01	10 ,, 15
July	—	—	—	—	1.81	17.80	25.17	4.08	

Note.—The Returns for November and December are at present incomplete.

(L.)—BANKS in PHILADELPHIA and NEW ORLEANS, 1859-60.
Monthly Averages deduced from Weekly Official Returns. \$5 = £.

Averages of Months of	Philadelphia.				New Orleans.			
	Liabilities.		Assets.		Liabilities.		Assets.	
	Circl.	Deps.	Loans.	Specie.	Circl.	Deps.	Loans.	Specie.
1859.	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £
Jan. ....	.55	3.46	5.27	1.21	2.14	4.46	4.20	3.24
Feb. ....	.55	3.27	5.30	1.19	2.44	4.66	4.50	3.34
March ....	.58	3.37	5.36	1.21	2.53	4.56	4.53	3.37
	.56	3.36	5.31	1.20	2.37	4.56	4.41	3.31
April .....	.67	3.48	5.61	1.27	2.56	4.39	4.21	3.18
May .....	.61	3.45	5.44	1.22	2.47	4.06	3.79	3.05
June .....	.57	3.21	5.16	1.06	2.35	3.58	3.55	2.82
	.62	3.38	5.73	1.18	2.46	4.01	3.85	3.02
July .....	.57	2.98	5.04	0.95	2.15	3.26	3.39	2.72
Aug. ....	.54	2.88	4.91	1.00	1.98	3.12	3.69	2.63
Sept. ....	.54	3.00	4.96	1.08	1.90	3.08	4.19	2.56
	.55	2.95	4.97	1.01	2.01	3.15	3.75	2.63
Oct. ....	.56	3.06	5.12	1.03	1.87	3.36	4.72	2.54
Nov. ....	.53	3.02	5.08	.96	1.91	3.63	4.98	2.45
Dec. ....	.52	2.94	5.00	.91	2.16	3.81	5.11	2.36
	.54	3.00	5.40	.97	1.98	3.60	4.94	2.45
Ave. Year	.57	3.17	5.35	1.09	2.20	3.83	4.24	3.85
1860.								
Jan. ....	.53	2.98	5.07	.90	2.50	3.77	4.97	2.50
Feb. ....	.53	3.01	5.09	.93	2.68	3.89	4.98	2.56
March ....	.54	3.06	5.17	.97	2.76	3.90	4.82	2.55
	.53	3.02	5.11	.93	2.65	3.85	4.92	2.54
April .....	.63	3.21	5.44	1.06	2.23	3.60	4.46	2.43
May .....	.58	3.27	5.50	1.06	2.45	3.51	4.04	2.34
June .....	.55	3.13	5.39	.86	2.29	3.27	3.47	2.16
	.59	3.20	5.44	.99	2.32	3.46	3.99	2.31
July .....	.57	3.18	5.37	.87	2.50	2.89	3.41	1.94
Aug. ....	.57	3.18	5.38	.95	1.90	2.82	4.00	1.97
Sept. ....	.60	3.24	4.98	.92	1.79	2.73	4.62	1.97
	.59	3.20	5.24	.91	2.06	2.81	4.01	1.96
Oct. ....	.58	3.36	5.63	.91	1.65	2.93	4.92	1.98
Nov.	—	—	—	—	—	—	—	—
Dec.	—	—	—	—	—	—	—	—

(M.)—NOTE CIRCULATION (UNITED KINGDOM).—COUNTRY BANKS.
Monthly Averages, 1859-60.

DATES.	ENGLAND AND WALES.			SCOTLAND.			IRELAND.			
	Private Banks.	Joint Stock Banks.	TOTAL.	Four Weeks ended	£5 and upwards.	Under £5.	TOTAL.	£5 and upwards.	Under £5.	TOTAL.
	(Fixed Issues, 4.40.)	(Fixed Issues, 3.30.)	(Fixed Issues, 7.70.)				(Fixed Issues, 2.75.)			(Fixed Issues, 6.35.)
1859.	Mlns. £	Mlns. £	Mlns. £	1859.	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £
Jan.	3.39	2.92	6.32	Jan.	1.54	2.56	4.10	3.20	3.53	6.73
Feb.	3.35	2.91	6.26	Feb.	1.46	2.44	3.90	3.24	3.66	6.90
March	3.36	2.99	6.36	March ..	1.41	2.37	3.78	3.27	3.66	6.93
April	3.55	3.12	6.68	April	1.38	2.39	3.77	3.34	3.62	6.96
May	3.47	3.03	6.49	May	1.54	2.44	3.98	3.50	3.55	7.05
June	3.36	2.93	6.29	June	1.74	2.74	4.48	3.41	3.39	6.80
July	3.36	2.92	6.29	July	1.56	2.57	4.13	3.31	3.24	6.55
Aug.	3.29	2.89	6.19	Aug.	1.44	2.53	3.97	3.28	3.07	6.35
Sept.	3.38	2.96	6.34	Sept.	1.43	2.61	4.04	3.29	3.32	6.61
Oct.	3.66	3.08	6.74	Oct.	1.54	2.66	4.20	3.55	3.70	7.25
Nov.	3.59	2.07	6.66	Nov.	1.69	2.82	4.51	3.61	3.83	7.44
Dec.	3.44	2.99	6.43	Dec.	1.72	2.87	4.59	3.53	3.87	7.40
Average.	3.43	2.90	6.33		1.53	2.59	4.12	3.38	3.53	6.91
1860.				1860.						
Jan.	3.56	3.03	6.59	Jan.	1.60	2.68	4.28	3.47	3.89	7.36
Feb.	3.41	2.93	6.34	Feb.	1.59	2.53	4.12	3.48	3.87	7.35
March	3.40	3.00	6.40	March ..	1.55	2.45	4.00	3.45	3.75	7.20
April	3.57	3.13	6.70	April	1.44	2.44	3.88	3.45	3.64	7.09
May	3.51	3.08	6.59	May	1.50	2.50	4.00	3.56	3.45	7.01
June	3.44	2.99	6.43	June	1.58	2.68	4.26	3.40	3.11	6.51
July	3.46	2.99	6.45	July	1.47	2.59	4.06	3.45	2.95	6.40
Aug.	3.35	2.92	6.27	Aug.	1.53	2.58	4.11	3.27	2.91	6.28
Sept.	3.30	2.93	6.23	Sept.	1.47	2.63	4.10	3.25	2.91	6.16
Oct.	3.57	3.08	6.65	Oct.	1.60	2.68	4.28	3.45	3.45	6.90
Nov.	3.48	3.05	6.53	Nov.	1.71	2.87	4.58	3.59	3.56	7.15
Dec.	3.34	2.94	6.28	Dec.	1.73	2.96	4.69	3.43	3.61	7.04
Average.	3.45	3.00	6.45		1.56	2.63	4.19	3.44	3.42	6.86

(N.)—BANK OF ENGLAND.—1859-60.
Rendered pursuant to the Act 7th and

ISSUE DEPARTMENT.					COLLATERAL COLUMNS.	
Liabilities.	DATES.	Assets.			Notes in Hands of Public. (Col. 1 minus col. 16.)	Minimum Rates of Discount at Bank of England.
Notes Issued.		Government Debt.	Other Securities.	Gold Coin and Bullion.		
Mins. £	1859.	Mins. £	Mins. £	Mins. £	Mins. £	1858. Pr. ct. p. an.
33,03	Jan.	11,01	3,46	18,56	20,91	9 Dec., 2½
33,35	Feb.	11,01	3,46	18,88	20,60	"
33,60	March ...	11,01	3,46	19,13	20,54	"
32,11	April	11,01	3,46	17,64	21,79	1859.
31,03	May	11,01	3,46	16,55	21,67	28 April, 3½
31,81	June	11,01	3,46	17,33	20,89	5 May, 4½
31,63	July	11,01	3,46	17,18	21,77	2 June, 3½
30,85	Aug.	11,01	3,46	16,38	21,83	9 " 3
30,93	Sept.	11,01	3,46	16,45	21,16	14 July, 2½
31,06	Oct.	11,01	3,46	16,59	22,24	"
30,75	Nov.	11,01	3,46	16,28	21,59	"
30,72	Dec.	11,01	3,46	16,25	20,84	"
29,82	Jan.	11,02	3,46	15,35	21,83	1860.
28,86	Feb.	11,02	3,46	14,39	21,09	19 Jan., 3
29,04	March ...	11,02	3,46	14,56	20,62	31 " 4
25,97	April	11,02	3,46	13,99	22,19	29 March, 4½
29,21	May	11,02	3,46	14,34	22,09	12 April, 5
29,99	June	11,02	3,46	15,51	21,00	10 May, 4½
29,87	July	11,02	3,46	15,39	22,04	24 " 4
29,40	Aug.	11,02	3,46	14,94	21,57	"
29,97	Sept.	11,02	3,46	15,50	20,98	8 Nov., 4½
28,62	Oct.	11,02	3,46	14,25	21,61	13 " 5
27,29	Nov.	11,02	3,46	12,82	20,54	15 " 6
27,03	Dec.	11,02	3,46	12,58	19,87	29 " 5
						31 Dec., 6

MONTHLY AVERAGES OF THE WEEKLY RETURNS.
8th Victoria, c. 32 (1844).

BANKING DEPARTMENT.														
Liabilities.					DATES.	Assets.					Totals of Liabilities and Assets.			
Capital and Rest.		Deposits.		Seven Day and other Bills.		Securities.		Reserve.						
Capital.	Rest.	Public.	Private.			Government.	Other.	Notes.	Gold and Silver Coin.					
Mins. £	Mins. £	Mins. £	Mins. £	Mins. £	1859.	Mins. £	Mins. £	Mins. £	Mins. £	Mins. £				
14,55	3,22	6,98	14,82	,85	Jan.	10,72	16,97	12,12	,49	40,30				
14,55	3,33	7,45	14,56	,79	Feb.	10,70	16,49	12,75	,72	40,67				
14,55	3,65	8,85	13,70	,77	March ..	10,90	16,84	13,26	,72	41,53				
14,55	3,13	6,34	14,84	,79	April ...	11,45	14,74	10,29	,67	39,65				
14,55	3,20	5,32	16,85	,79	May ...	11,30	19,40	9,35	,66	40,72				
14,55	3,17	8,24	14,92	,76	June ...	11,30	18,76	10,92	,70	41,64				
14,55	3,28	6,08	14,94	,82	July ...	11,41	17,76	9,88	,61	39,68				
14,55	3,67	6,29	14,03	,85	Aug. ...	11,21	18,35	9,22	,62	39,40				
14,55	3,72	8,59	13,11	,85	Sept. ...	11,22	19,18	9,76	,67	40,83				
14,55	3,27	7,25	13,75	,92	Oct. ...	11,29	19,03	8,82	,59	39,74				
14,55	3,16	6,95	14,11	,86	Nov.	10,90	18,95	9,36	,62	39,64				
14,55	3,15	9,23	13,37	,76	Dec. ...	10,92	19,56	9,88	,68	41,05				
14,55	3,01	6,35	14,47	,83	1860.	10,80	20,02	7,99	,69	39,47				
14,55	3,50	6,65	14,21	,73	Jan.	10,17	21,00	7,77	,68	39,63				
14,55	3,74	9,59	13,09	,71	Feb. ...	10,21	22,33	8,41	,73	41,68				
14,55	3,35	6,91	14,66	,70	March ..	9,85	23,34	6,28	,71	40,18				
14,55	3,25	7,38	12,67	,68	April ...	9,73	20,54	7,74	,76	36,56				
14,55	3,24	8,54	12,26	,66	May ...	9,77	19,46	8,98	,79	39,26				
14,55	3,35	4,94	14,81	,72	June ...	9,75	20,03	7,83	,76	38,39				
14,55	3,49	5,21	13,71	,73	July ...	9,73	19,67	9,65	,76	37,99				
14,55	3,80	7,59	13,26	,73	Aug. ...	9,66	19,76	8,99	,76	39,18				
14,55	3,25	4,85	13,54	,78	Sept. ...	9,56	19,46	7,02	,74	36,97				
14,55	3,18	5,84	12,93	,76	Oct.	9,49	20,24	6,75	,79	37,27				
14,55	3,18	7,09	12,07	,66	Nov. ...	9,53	20,12	7,17	,75	37,57				
					Dec. ...									

(O.)—The Import and Export Trade of the Years 1859 and 1860.

The following summary as regards 1859, is from the "Times" of 18th January, 1861:—

"The annual statement of our foreign and colonial trade and of navigation, shows that in the year 1859 the American continent, with Cuba and the West Indies, took 40,000,000*l.* of our produce and manufactures; and India, Singapore, and Ceylon, with Australia and China, took 37,000,000*l.* more. To these great countries we disposed of nearly 30,000,000*l.* of our cotton goods and yarn out of the whole 48,000,000*l.* exported. The United States took 4,600,000*l.* of our cotton goods, 4,476,000*l.* of our woollens, 2,160,000*l.* of linens, and 1,568,000*l.* of apparel and haberdashery; India, including Singapore, took 14,290,000*l.* of cotton goods and yarn, China only 3,190,000*l.*, and 700,000*l.* of woollens; Australia, 1,870,000*l.* of apparel and haberdashery, 790,000*l.* of cottons, and 765,000*l.* of woollens.

"For our *iron* we found our principal market in the United States (3,000,000*l.*), and also for our tin (plates) and our hardwares (above 1,000,000*l.* of each); for our leather and saddlery in Australia (1,000,000*l.*); for our agricultural implements in Australia and in Russia; for beer in India (777,378*l.*) and Australia (660,358*l.*); for butter in Australia (312,914*l.*); for earthenware in the United States (600,000*l.*).

"The exports of our produce to Australia 4,000,000*l.* in 1852, were 11,000,000*l.* in 1859, and those to India have doubled since 1855; to the United States they were not 12,000,000*l.* in 1849, they were above 22,000,000*l.* in 1859; to China, 1,537,000*l.* in 1849, 4,457,000*l.* in 1859.

"To New Zealand we sent 632,907*l.* worth of our produce in 1859, not far from double what we sent only three years before.

"Our exports to the *whole world* made no progress in the year 1859. In most *European countries* the demand for our produce was slack. France took less upon the whole than in the previous year, though her demand for some articles increased. She took no less than 1,391,000 tons of coal, and 493,083*l.* worth of copper. There was a considerable increase, however, in our trade with Sweden, Norway, and Denmark; and Russia took more of our produce by nearly 1,000,000*l.*, raising her demand for machinery to 1,000,000*l.*, and for iron to 1,200,000*l.*

"Our entire *imports* for 1859 (179,182,355*l.*) were not far from 15,000,000*l.* above those of the previous year, and our *exports* (our own produce 130,411,529*l.*, foreign and colonial produce 25,281,446*l.*—in all 155,692,975*l.*) were 16,000,000*l.* above those of the previous year; and it must be borne in mind that the returns of the value of our *imports* include *freight*, the exports do not.

"In conducting this trade 26,520 visits were paid to ports by *British vessels*, and 22,351 by foreign. The totals require such figures to express them as were never until now employed to set forth a year's trade of a nation. The world beyond the seas, civilized and uncivilized, sent to our shores on an average *every day* merchandize of the value of nearly 500,000*l.*, and to bring it to us nearly 1,000 ships came into our ports *every week*. Our exports of produce and manufactures of the United Kingdom in the short space of *eight years* 1852-59 have exceeded in value the capital of the national debt. In ten years they have doubled; in 1849 they were 64,000,000*l.*, in 1859 they were 130,000,000*l.*

"The enormous progress of some of our *colonies and possessions* of late years has more than restored the proportions sent to foreign countries and to British possessions to what they were twenty years ago—two-thirds and one-third; in 1840 foreign countries took 34,000,000*l.*, and British possessions 17,000,000*l.*; and in 1859 foreign countries took 84,000,000*l.*, and British possessions 46,000,000*l.* The *exports* of our produce in 1859 amounted to about 4*l.* 10*s.* per individual inhabitant of the kingdom; twenty years ago they were not 2*l.*, and ten years ago they were not 3*l.*"

And the following statement of the results of 1860 is from the "Times" of 27th February, 1861:—

"The trade of the United Kingdom, in 1860, having reached an unprecedented point, the details of its distribution are of more than ordinary interest.

"Although the *total declared value of our exports* shows an *increase* of more than four per cent. over 1859, there has been a falling off of more than 5 per cent. in the shipments to our *colonial possessions*, owing to the diminished activity of the Indian demand and the stagnation in Australia. The exports to the *United States* likewise exhibit a falling off. As our consignments to our own possessions and to America constitute about *one-half* of our aggregate trade, it is a striking and encouraging circumstance that the effects of a revulsion in those quarters have been more than compensated by an increase in the various minor channels of commerce. At the commencement of the disunion crisis in America it was pointed out that the fears regarding the consequences of the diminution of orders from that country were in a great measure needless. Our traffic being so extensive, the moment a temporary check occurs in one region we force ourselves into another; and in the present case it must be borne in mind that the panic which prevents the Americans from making their usual importations prevents them at the same time from carrying on their usual competition with us in distant markets, and throws the general trade of the world more than ever into our hands.

"Moreover, the movements now in progress are especially calculated to give a new impulse to the prosperity of *India*, whither our annual shipments are already nearly equal to those to the United States.

"Among our most improving customers during the past year *Brazil* and *Buenos Ayres* figure prominently, and this progress is likely to be maintained in the former country from the introduction of railways, and in the latter from the steady increase of European immigration, which will result from the establishment of a firm Government and the augmented facilities for steam communication. Both also, as well as the neighbouring republics of Uruguay and Chili, the trade with which has greatly advanced, are able to claim a high position as regards financial credit. The time, in fact, seems at length approaching when the dream of forty years back as to the future destiny of South America will begin to find realization.

"Among *European countries* which figure best are the States of Northern Germany, these having been rendered prosperous by our grain purchases. Holland, Portugal, Spain, Sardinia, Sicily, and Belgium likewise present very favourable totals.

"The increase to *France*, although considerable, has been scarcely adequate to the expectations of the promoters of the treaty.

"Russia shows a heavy decline, and appears much more in the character of a 'sick man' than Turkey, which has taken our manufactured goods to an amount 17 per cent. in excess of that of the preceding year, and 35 per cent. in excess of the total taken by Russia. In the annexed list each country is placed in the order of the importance of its trade with us:—

(P.)—Exports (Declared Value) of British Manufactures and Merchandise in 1859 and 1860.

Countries.	1859.		1860.	
	£	£	£	£
1. British Possessions—				
East Indies	19,844,920		16,964,045	
Australia	11,229,448		9,707,499	
British N. America...	3,616,236		3,737,574	
Hongkong	1,931,576		2,446,579	
British West Indies...	1,608,138		1,844,715	
Cape of Good Hope...	1,760,045		1,827,093	
Singapore.....	1,421,067		1,671,110	
Gibraltar	713,295		1,159,382	
Malta and Gozo	624,110		704,087	
Ceylon	667,387		671,624	
Channel Islands	615,330		655,699	
British Guiana.....	555,511		569,696	
Mauritius.....	567,159		538,835	
Ionian Islands.....	250,949		345,167	
British West Coast } of Africa	278,971		340,311	
Natal	174,925		236,933	
British Honduras ...	115,699		142,521	
St. Helena	43,577		46,312	
Aden	43,626		45,297	
Ascension	9,634		8,685	
Falkland Islands.....	11,185		5,306	
Labuan	—		2,583	
Andaman Islands.....	—		929	
Heligoland	60,238		275	
		46,143,996		43,672,257
2. United States—				
Ports on the Atlantic	22,116,372		21,018,500	
Ports on the Pacific...	437,033		594,611	
		22,553,405		21,613,111
3. Germany—				
Hanse Towns	9,178,399		10,364,422	
Prussia.....	1,492,088		1,884,593	
Hanover	998,477		1,107,250	
Oldenburg	53,053		73,957	
Mecklenburg	61,982		61,523	
		11,783,999		13,491,745
4. South America—				
Brazil	3,685,718		4,444,512	
Beunos Ayres	958,677		1,782,399	
Chili.....	1,474,606		1,703,783	
Peru.....	857,568		1,381,944	
Uruguay	693,622		922,367	
New Granada	729,468		810,870	
Venezuela	317,716		323,663	
Ecuador	22,261		74,139	
		8,739,036		11,443,677
5. Holland		5,375,468		6,113,893
6. France		4,754,354		5,249,681
7. Italy—				
Sardinia	1,404,982		1,867,228	
Two Sicilies.....	1,162,335		1,321,210	
Tuscany	801,705		1,034,052	
Papal States.....	260,077		293,178	
		3,629,099		4,515,669

(P.)—Exports of British Manufactures, &c.—Contd.

Countries.	1859.		1860.	
	£	£	£	£
8. Turkey	—	3,750,996	—	4,408,649
9. Russia—				
Northern ports	3,491,803		2,886,839	
Southern ports	546,888		380,893	
Territory in N. E. } Asia	13,762		600	
Settlements in N. } W. America.....	602		—	
		4,053,060		3,267,732
10. China	—	2,525,997	—	2,871,849
11. Foreign West Indies	—	2,571,878	—	2,669,968
12. Spain and the Ca- nary Islands	—	2,080,749	—	2,606,802
13. Egypt, Mediterra- nean ports	—	2,175,651	—	2,479,719
14. Portugal, Madeira } and the Azores ... }	—	1,397,711	—	1,847,635
15. Belgium	—	1,479,270	—	1,611,899
16. Java	—	1,135,071	—	1,413,915
17. Sweden and Norway	—	1,042,441	—	1,044,751
18. Austrian Territories...	—	789,881	—	993,634
19. West Coast of Africa, } foreign	—	712,189	—	966,981
20. Denmark, including } Iceland	—	723,933	—	729,877
21. Phillippine Islands ...	—	685,490	—	674,235
22. Syria and Palestine ...	—	622,457	—	655,297
23. Mexico	—	597,899	—	462,629
24. Greece	—	262,074	—	343,548
25. Central America	—	226,720	—	182,186
26. Wallachia and Mol- davia	—	111,031	—	172,862
27. Morocco	—	96,399	—	171,209
28. Algeria	—	21,977	—	43,754
29. South Sea Islands ...	—	114,943	—	33,972
30. Persia	—	18,792	—	31,586
31. Islands in the Indian } Seas	—	372	—	19,033
32. Cape Verd Islands ...	—	16,214	—	16,097
33. Siam	—	—	—	13,202
34. Tunis	—	5,597	—	3,580
35. Eastern Coast of } Africa.....	—	4,391	—	2,812
36. French possessions } in India	—	—	—	1,408
37. African ports on the } Red Sea.....	—	201,917*	—	903
38. Bourbon	—	—	—	351
39. Greenland and } Davis' Straits.....	—	45	—	105
40. Camboja, Cochin } China and Tonquin }	—	505	—	—
		£130,411,529		£135,842,817

* £200,000 Telegraphic Wires.

(Q.)—Statement by Mr. Caird, in the House of Commons, on 28th February, 1861, on the Subject of the Failure of the Harvest of 1860.

I gladly avail myself of the opportunity of appending to the preceding reports the following important statement by Mr. Caird—one of the highest living authorities on such questions—relative to the failure of the harvest of 1860:—

“ On the motion for going into Committee of Supply on 28th February, 1861.

“ Mr. Caird said he was anxious to call the attention of the House to the serious deficiency of *last harvest* (1860), by which interests of the greatest magnitude were affected. He was aware that in taking this course he was assuming considerable responsibility, but as the question had not been touched upon either in the Speech from the Throne or in the observations which fell from Ministers or the leaders of Opposition, he felt it a public duty to bring the matter under the notice of the House. (Hear, hear.)

“ It would be necessary for him to give a short history of the *weather* during the season 1859-60, and its effects upon the harvest. In *October*, 1859, we were visited by a frost more severe, probably, than any in the memory of persons now living. This not only prevented a large breadth of wheat from being sown, but its effects were felt in the almost total destruction of the Green Fodder crops. The severe winter caused great suffering to the stock farmers, and the cold wet spring which followed put them to enormous expense in buying fodder and carrying their stock forward to grass. A *cold wet summer* followed the cold spring, and though there were heavy crops of grass, little progress could be made in getting them in, and very few crops were saved. The same unpropitious weather continued during the harvest, and for thirty-five out of the forty days preceding the end of August, rain fell, and the temperature was 13 degrees below what it had been in the previous season. The few intervals of sunshine did not admit of the crops being harvested to any extent, except in the finest and earliest parts of the country, and in some of the later counties—Derbyshire, Staffordshire, Northumberland, and elsewhere—the crops in some instances remained in the field as late as January.

“ The scarcity produced by such unprecedented difficulty in recovering the corn crop was aggravated by a failure in the *potato crop*, which, although not of as much importance in this country as in Ireland, nevertheless involved an increased demand for corn.

“ He was sorry to say that the prospects of a future harvest were likewise seriously affected by the unpropitious weather which had lasted through the seed time (1860-1), and had rendered it impossible that they could hope, even at the best, for more than an average crop this year.

“ The House would not be surprised to hear that the result of so much bad weather had been highly disastrous. No reliable data existed, and all that they could hope to do was, therefore, to form an approximate idea. He had frequently pressed on the House the advantage of procuring returns of the acreage of the crops, and the advantage of such a system must now be evident. No objection would be offered by the great body of the tenant farmers, and the returns could be obtained at a very small expense. They had, however, no accurate *data* of that kind with regard to England. With regard to Ireland they had; and from them it appeared that the *wheat crop* in that country had declined *one-sixth* as compared with what it was in 1857. He did not know that there was a diminution to the same extent in England; but though they had no accurate statistics to guide them in respect to the underground crop, they did possess some facts which enabled them to form an opinion as to the yield. During many years' experience he had found the Board of Trade returns to afford a good comparative *data* of the yield, past and present. He had examined those returns for a great number of the

market towns; and, taking the five months from the 1st of September to the 1st of February for the last five years, he found that the returns for the last year (1860-1), showed a deficiency of no less than 36 per cent. Besides the means taken by the Board of Trade to collect information on this important subject, very praiseworthy efforts were made by newspapers to supply the public with authentic *data*. The “Agricultural Gazette” had done much in this way, and as a result of its inquiries, made an estimate which was subsequently confirmed by a return published in the “Mark Lane Express.” He found that out of 313 returns regarding the wheat crop, more than three-fourths represented that in January last there was a deficiency of from 20 to 60 per cent. on the average crop. Those returns also dealt with *potatoes*. He had made private inquiries of eminent agriculturists in various parts of the country, and had received full corroboration of the facts which he had laid before the House. Other evidence also corroborated these facts. The returns of railways running through corn producing countries did so. The Great Northern Company complained that for the last six months there had been a falling off in the traffic in consequence of the deficiency; the Eastern Counties repeated the same tale, and the North Western had suffered from the same cause. With these facts before him he should come to the conclusion that, estimating both quantity and quality—for there was a deficiency in quality also (hear)—the *yield of corn at the last wheat harvest would be at least one-third deficient*. In *Scotland*, he was happy to say, things would be very different. The wheat harvest there had been favourable; but hon. gentlemen would understand how little that told on the general consumption of the country, when he stated that the entire wheat yield of Scotland would not supply more than ten days' consumption for the whole country. From *Ireland* the accounts were conflicting. It appeared that in the earlier districts there was an average, but that in the later the results had been as disastrous as in England.

“ He had obtained from the Custom House the comparative returns of imports during the last five years. From these he found that for the five years preceding last year the imports of wheat and flour during the six months from August to February were on the average 2,438,000 qrs., while for the six months from August to January last they were 5,627,000 qrs., or more than *double* the average of the preceding five years, and more in those six months than in any one whole year, except the year 1853. Such had been the beneficial results of free trade. (Hear, hear.) While there was famine in our fields there was none among our people. (Hear, hear.) He believed that we had just reaped the *worst crop since 1846-47*, the time of the failure of the potato crop. In 1828, 1829, and 1830 there were three consecutive deficient crops, which were not—as was very much the case with the present deficiency—confined to this country, but extended over Europe. The consequences were the French and Belgian revolutions and an agitation for the Reform Bill. From 1836 to 1841 there were six partially deficient crops. In 1839 there were large imports and severe pressure, and discounts rose. In 1845, 1846, and 1847 there were some bad crops. The potato famine had taken place in Ireland. There were many failures in 1847, and high rates of discount. The French revolution and disturbances in all parts of the Continent took place in the following year. On they came to the period when free trade was in operation, The first deficient harvest after 1848 was in 1853. It was a deficiency of 29 per cent. That of the year 1860 he took, as he had said, at 36 per cent; but the deficient harvest of 1853 was followed by a magnificent harvest in 1854, and there was no monetary pressure of any serious character, and nothing serious occurred in the country. They now came to 1860, which appeared to be the worst crop we had had since free trade; and, unlike 1853, we had not only a bad crop, but a bad crop following a series of years of great public expenditure, while 1853 followed a series of years in which there was only a very moderate expenditure. Mr. Porter calculated that during the first fifty years of the present century this country did not receive more than *three weeks' consumption* of foreign corn in each year. In the present year it would probably not receive less than six months' consumption for the whole population. The demand for *meat and wool* had naturally turned the

attention of the farmers to that branch of the farming business. Accompanying that there had been a gradual rise in the rate of agricultural wages throughout the country. The consequence of all this had been, that within the last six months we had imported more foreign grain than we had done in the ten years between 1820 and 1830. (Hear, hear.) We had the satisfaction of knowing that while there had been a shortcoming in this country there had been an abundant crop on the continent of Europe, and a superabundant crop in the United States of America; so that the people of this country had no reason to fear that bread would get either excessively dear or scarce. During the six months that elapsed between August and January, 1859, our imports of corn from America amounted to 148,000 qrs; for the corresponding six months of the last and present year, our imports were 2,195,000 qrs., for which we paid 6,250,000*l.*, or nearly twenty times as much as we paid in the previous year. From Russia and France the imports of corn were also large, so that we had paid for our imports of corn this year an excess of 12,200,000*l.* over last year. (Hear, hear.) In making these large imports of grain we had necessarily incurred a great expense, and the increase in the price of bread to the people of this country had been very considerable. It had been estimated that the *wheat consumed in this country* amounted to 20,000,000 qrs. annually, so that 1*s.* a quarter on that quantity, when the price rose or fell, amounted to 1,000,000*l.* We had, however, during the last six months to pay 14*s.* a quarter more than in the preceding year, so that the cost to the country was an increase of 14,000,000*l.*"

MISCELLANEA.

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I.—*The Amended Tariff of 1860.*

We copy from the *Economist* newspaper of 22nd September, 1860, the following convenient summary of the amended British Tariff of 1860:—

"Now that the simplified Tariff enacted in the Session of 1860, has been brought into full operation under the Act 23 and 24 Vict., cap. 110, 28th August, 1860, entitled 'An Act to Consolidate the Duties of Customs,' our readers will be glad to have this tariff presented to them in a concise and classified shape. Till this year (1860), Customs duties were levied on about 150 principal articles, most of them subdivided in the tariff into further different heads, so that 408 articles were separately chargeable with duty. Now, as will be seen, the articles liable to duty may all be reduced under twelve principal divisions,—and in reality under ten only; since one division contains merely those duties which are required to countervail those laid by the Inland Revenue on the same commodities produced at home, and those contained in another will cease and determine in eighteen months or less. We here give the remaining ten principal divisions, which thus properly constitute the Customs Tariff of Great Britain, with the amount of duty received under each of them in the year 1859.

	£
I.—Fermented Liquors	4,425,000
II.—Sugar	6,285,000
III.—Tobacco	5,574,000
IV.—Tea	5,409,000
V.—Coffee	431,000
VI.—Cocoa	15,000
VII.—Grain and Flour	533,000
VIII.—Fruit	565,000
IX.—Timber	615,000
X.—Pepper	111,000
	23,963,000

AMENDED TARIFF.—23 & 24 Vict., chap. 110.—28th August, 1860.

I.—*Fermented Liquors.*

	£	s.	d.	
1. Beer and Ale	1	—	—	per barrel.
2. Chloroform	—	3	—	per lb.
3. Essence of Spruce	10	—	—	per hundred.

I.—Fermented Liquors—contd.

	£	s.	d.	
4. Varnish containing spirits	-	12	-	per gallon.
5. Vinegar.....	-	-	3	"
Pickles in Vinegar	-	-	1	"
6. Brandy, Geneva, Rum from non-producing countries, unenumerated plain Spirits	-	10	5	"
7. Rum and similar Spirits from producing countries, Rum-Shrub, and other Liqueurs from India and the Colonies	-	10	2	"
8. Perfumed Spirits, Eau-de-Cologne, Mixed and Sweetened Spirits unenumerated	-	14	-	"
9. Wine, and Lees of Wine, (<i>foreign</i>), till December 31, 1860	-	3	-	"
Wine thereafter, if containing less than 18 degrees of proof spirit	-	1	-	"
Less than 26 degrees	-	1	9	"
Less than 40 "	-	2	5	"
Less than 45 "	-	2	11	"
If in bottles, and containing less than 40 degrees spirit	-	2	5	"
Wine, and Lees of Wine (<i>colonial</i>)	-	2	9	and 5 per cent.

" N.B.—All *Wine* containing 45 per cent. of proof spirits, to be charged as spirits.

II.—Sugar.

1. Sugar Candy and refined	-	18	4	per cwt.
2. White clayed	-	16	-	"
3. Yellow Muscavado	-	13	10	"
4. Brown Muscavado	-	12	8	"
5. Cane Juice or Malado	-	10	4	"
6. Molasses	-	5	-	"
Succades and Confectionary	-	-	2	per lb.

III.—Tobacco.

1. Unmanufactured	-	3	-	per lb.
2. Manufactured and Cigars	-	9	-	"
3. Snuff	-	6	-	"

With 5 per cent. thereon.

IV.—Tea.

1. Tea	-	1	5	per lb.
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V.—Coffee.

1. Green Coffee.....	-	-	3	"
2. Kiln-dried, washed, or ground	-	-	4	"
3. Raw or dried Chicory	-	6	-	per cwt.
4. Roasted or ground Chicory	-	-	4	per lb.

VI.—Cocoa.

1. Raw Cocoa	-	-	1	per lb.
2. Cocoa Paste or Chocolate	-	-	2	"
3. Cocoa Shells or Husks.....	-	2	-	per cwt.

VII.—Corn and Grain.

	£.	s.	d.	
1. Wheat and all Grain*	-	1	-	per quarter.
2. Flour and Meal of all sorts	-	-	4½	per cwt.

VIII.—Fruit.

1. Dried, but not succades or preserves	-	7	-	per cwt.
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IX.—Timber.

1. Hewn Timber, Firewood, Lathwood, Staves under 72 inches in length, Teak-wood, other woods for shipbuilding	-	1	-	per load.
2. Wood (sawn or split), hoops, shovel hilts, staves exceeding 72 inches in length	-	2	-	"
3. Furniture and hard woods	-	1	-	per ton.
4. Foreign-built Ships	-	1	-	"

X.—Duties to countervail Excise Duties.

1. Paper.				
Brown paper, stained paper, waste paper, mill boards, books since 1801, prints	-	16	-	per cwt.
Paste board, colonial and other privileged books, colonial prints	-	15	-	"
(Either ¼d. each, or 1½d. bound per dozen, at the option of the importer.)				
2. Malt	1	5	-	per quarter.
3. Hops, till December, 1860	2	5	-	per cwt.
From January 1, to December 31, 1861	1	-	-	"
Thereafter	-	15	-	"
4. Plate, gold	-	17	0	per oz. troy.
" silver	-	1	6	"
5. Playing Cards	-	15	0	per doz. packs.
6. Dice	1	1	-	per pair.

" N.B.—Properly speaking the duty on spirits ought to be placed in this list, as it is now virtually the same as the Excise duty on home made spirits.

XI.—Pepper.

1. Pepper	-	-	6	per lb.
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XII.—Terminable Duties.

1. Hats and Bonnets (till March 31, 1861)	-	1	3	"
2. Corks (cut), till March 31, 1862	-	-	3	"

" N.B.—Besides the above, *one penny per package*, or other unit of entry (usually about *one quarter per cent.* on the value), is levied on all important articles except corn and timber; *one shilling and sixpence* on every export bill of lading; *one-eighth per cent.* addition to the duty on all *tobacco* delivered from bonded warehouses; and *one quarter per cent.* on all other goods so delivered."

* (Except Rice, which is free.)

II.—New Indian Loan of £3,000,000, February, 1861.

THE following letter to the *Times*, dated from the Temple, 4th February, 1861, explains very clearly the present position of the recent Indian Loans:—

“As the public is about to be called upon to subscribe a further sum of 3,000,000*l.* for the purposes of the Indian Government, it may be well to place before them the exact position of the present debt, so far as it has been affected by recent legislation. There would seem to be the greater reason for so doing, as you have recently drawn attention to the questionable way in which a large addition has been made to the stock created in 1859, which goes by the name of the Indian Five per cent. loan.

“By the 21st and 22nd of Victoria, cap. 3 (1858), power was granted to raise 8,000,000*l.* by the *issue of debentures* for a fixed period, repayable at par, which power was exercised to the full extent.

“By the 22nd of Victoria, cap. 11, further power was granted to raise 7,000,000*l.* by a similar *issue of debentures*, and this power was also exercised to the full extent.

“By the 22nd and 23rd of Victoria, cap. 39 (1859), further power was granted to raise 5,000,000*l.* either by the *issue of debentures* as before, or by the creation of *capital stock*, repayable also at par at a fixed period. The latter course was adopted, and the stock created under the powers of the Act is that which is known as the *Indian Five per cent. loan*.

“These three Acts all contained a power to raise, by any of the modes therein authorized, funds out of which to repay the loans raised under them as they might become due, but limited in each to the amounts respectively raised by virtue of any of the powers respectively granted.

“By the 23rd of Victoria, cap. 5, power was granted to raise *in such capital stock*, funds out of which to repay any *East India Bonds* (as distinguished from any bonds or debentures issued under the powers of the several Acts before-mentioned) that might from time to time be lodged for repayment by the holders, on their giving the usual twelve months' notice. Under the powers of this Act an addition of more than 3,000,000*l.* has been made to the amount of capital stock originally created, in consequence of *India Bonds* to that amount having been sent in for payment and exchanged for stock, and it is evident that it is susceptible of increase to the whole amount of the floating Indian debt known as East India Bonds. Such a power may or may not be exercised in practice to the full extent, but it undoubtedly exists.

“By the 23rd and 24th of Victoria, cap. 130 (1860), power was granted to raise 3,000,000*l.*, which power it is now proposed to exercise by the creation of additional *capital stock* to that amount, and for which the public are invited to tender on Friday next.

“The figures, therefore, will stand thus:—Original issue of capital stock under the 22nd and 23rd of Victoria, cap. 39, 5,000,000*l.*; addition made to ditto under the 23rd of Victoria, cap. 5, 3,079,000*l.*; addition now to be made to ditto under the 23rd and 24th of Victoria, cap. 130, 3,000,000*l.*; probable addition to ditto by repayment of debentures within the next two or three years, under the 22nd and 23rd of Victoria, cap. 39 (*viz.*, 8,000,000*l.* and 7,000,000*l.*), 15,000,000*l.*, making a total of 26,079,000*l.* And this amount is subject to a contingent increase at any time by conversion of East India Bonds in addition to the above amount already converted of 3,079,000*l.*”

The following is the result of the biddings for the 3,000,000*l.* on Friday, 9th February, 1861.

“It appears that the total amount of the tenders for the 3,000,000*l.* Indian loan was 13,270,800*l.*, of which about 6,000,000*l.* was at prices at and above the

minimum fixed by the Council—98½—and about 7,000,000*l.* below it, None of the tenders at the *minimum* have been successful, the lowest tender accepted in full being at 98*l.* 11*s.* 4*d.*, while of tenders for 681,000*l.* at 98*l.* 11*s.* 3*d.*, the proportion to be taken is only 108,200*l.* Of the remainder the principal portion was at prices ranging between 98 and 98½. These circumstances indicate that a majority of the bidders were less sanguine than the India Council, and that an insufficient estimate had been formed of the feeling in favour of the loan among the general public.”

III.—Effect of Trades Unions in Victoria (Australia), and of frequent Political Changes in New South Wales.

THE following important article is from the *Melbourne Argus* of November, 1860:—

“It is generally understood that for some weeks past the actual rates of *wages paid to artisans* connected with the *building trades* have been far below the nominal quotations; and that contracts have been taken by associated operatives at prices which will not enable them to earn more than from six shillings to eight shillings per day. Convinced of the impolicy of endeavouring to maintain an arbitrary and unvarying scale of remuneration, the attempt has been quietly abandoned by numbers of sensible mechanics, and considerable secessions are said to have taken place from those societies which were established partly with a view to exempt (as it was imagined) the wages of skilled labour from those fluctuations to which every other commodity is subjected. The more sagacious of the artisans are beginning to perceive that the policy into which they were beguiled by their shallow advisers defeated the very object it was designed to promote, and that, by insisting upon an artificial maximum of wages, they reduced employment to a minimum. Only such works as were absolutely necessary were engaged in by capitalists; and while a few men obtained occupation at extreme rates, numbers failed to obtain any employment whatever, and were thrown for support upon the charity of their fellow-workmen. Nor did the evil end here. Reports were transmitted to Europe of the paucity of work and the destitute circumstances of those who were compulsorily idle, and such reports very naturally operated to the prejudice of the colony and lessened the number of unassisted emigrants who selected Victoria as their destination. With no material additions to our population from external resources, there was no inducement for capitalists to build, no expansion of our seaport towns, no growth of trade, and no extension of settlement in the interior, such as immigration promotes in Canada and the United States.

“The inevitable result has been that those who were most active in their efforts to impede the operation of natural laws, and to establish a sort of Fool's Paradise in Victoria, have been first to pay the penalty of their own short-sightedness and folly. *Wages have actually fallen far below the rates which would have invited the outlay of capital a short time since, and men are secretly accepting one-half, and even one-third of the rates which are ostensibly current.* Nor shall we be surprised to find the more right-thinking of the operative classes, after having relinquished the delusive notion that an unalterable standard of wages can be insisted upon at a time when the prices of all articles and the profits of all trades are gravitating towards a lower level, rejecting likewise the equally fallacious expectation that a young country can make rapid progress without a constant influx of population from without; and we shall be prepared to find our skilled artisans becoming the most important solicitors for a revival of assisted immigration.

“The worst misfortune which befalls artisans, both in the mother-country and in these colonies, is the credulous faith which they repose in selfish and designing advisers of their own class, and the jealousy and distrust with which they regard the disinterested advice tendered by those who can have no motive to mislead and

no temptation to misinform. The well-paid secretary, who urges persistence in a ruinous strike, sustained by funds which afford him a handsome salary, is looked up to as an authority and accepted as a guide; but the journalist or other person who suggests that wages should be left to rise and fall according to the demand and supply of labour, and who ventures to point out that a man may be really better off with ten shillings per diem at the present moment than he was with sixteen shillings a-day a twelvemonth ago, is accused of a desire to grind the faces of the poor and to convert independent workmen into abject serfs.

"It is too much, perhaps, to expect from the associated trades a candid acknowledgment of the error they have committed in endeavouring to maintain an artificially high rate of wages, and a frank declaration of their determination to abstain from any such mischievous intermeddling for the future; but we think that the interests of the operative classes would be effectually promoted if our skilled artisans were to abandon the inconsistent line of conduct which they now pursue in openly prescribing one scale of remuneration and secretly adopting another.

"If skilled labourers would invite the flow of that capital which is now accumulating in its various reservoirs into those channels which would furnish employment to artisans, they should publicly signify, what they privately exhibit, their willingness to accept a rate of wages regulated by the circumstances of the times and the alteration which has taken place in the value of money, as exchangeable against every other commodity. With meat at 2d. and 3d. a-pound, bread at 10d. the four-pound loaf, fresh butter at 1s. 2d. a-pound, and most descriptions of fruit and garden produce cheap and plentiful, the condition of the mechanic in Victoria, earning from two to three pounds a-week, is far preferable to that of tens of thousands of highly-educated men in Europe. Rent, it is true, is too high here; but that circumstance is partly attributable to the high rates of wages hitherto prevalent; and a reduction in these will be followed by a fall in those, inasmuch as the houses which will hereafter be erected by cheaper labour, will enter into competition for tenants with those dwellings which are now extant, and the rental of which will have to be assimilated to that of the less costly and more convenient structures of a later date.

"There is another aspect in which this question ought to be considered by the operative classes. So long as the general public are under the impression that the wages of artisans in the building trades range from fourteen to sixteen shillings per diem, and so long as contractors know that they can engage men at from six to eight, the chances are that the contractor absorbs a larger share of the profit of the work executed than he is fairly entitled to, and workmen incur the odium of keeping up high prices and preventing building operations being more extensively undertaken, without in reality meriting the censure or enjoying the compensating emolument. A trader who habitually asks one price for his commodities, and takes another, is usually avoided by all except customers who are fond of haggling; and the artisan who adopts similar tactics may depend upon it that he does himself a great injury by interrupting that freedom of exchange between capital and labour which enables him to secure the best price for the industry and skill which he has to dispose of."

The *Australian Gazette* (London) of 9th February, 1861, gives the following facts relative to the recent rapid political changes in *New South Wales*:

"For the present we would deal with the case of *New South Wales*, and the history of the last five years will afford abundant evidence that something is required for the purpose of giving increased stability to the Local Government. The first Parliament under the new constitution, or Responsible Government, as it is termed, met on the 22nd of May, 1856. The then Ministry of Mr. Donaldson continued in office until the 21st of August following, when they resigned upon a motion being carried against them by a majority of two. The next Ministry, under Mr. Cowper, met on the 15th of September, and on the 25th—or nine days after—

wards—a vote of want of confidence having been carried, they too resigned. On the 28th October, a third administration was formed, and continued in office until the 4th of September of the following year, 1857, when, having been defeated on the 'Elections' Bill, they followed the steps of their predecessors. A fourth Ministry was formed on the 7th of September, and on the 17th of December, after being beaten on a Government bill for the assessment of stock, a dissolution of Parliament took place. The New House assembled on the 24th of March, 1858; on the passing of the Electoral Bill a second appeal to the country took place, and on the 11th of April, a second dissolution ensued. On the 20th of October following, the Ministers resigned, after sustaining a defeat by a majority of 57 to 8 upon the Education Bill. A fifth Government was formed, which, in its turn, was displaced on the 1st of March, 1860, by a want of confidence. With the present, or rather the late Ministry, there was a further collision in November, 1860, which will no doubt end in a resignation—a dissolution having been already ordered. So that in *New South Wales* there has been, in the short period of five years and six months, not less than four general elections and five ministries.

"The consequence of this state of things is, however, that which we have most to deplore. Men of ability and experience have abandoned the arena of politics, and now neither guide the Legislature by their counsels nor aid it by their experience. The ablest men retire disgusted from the management of public affairs, and seek, either in private life in the colony, or in other countries, protection from these violent attacks of party strife and angry politicians. Of the twenty-six gentlemen who have held office since 1856 in *New South Wales* only ten are now in Parliament; of these four are in the Upper House and six are found in the ranks of opposition. Two others are in England, six have retired into private life, and the remainder are dead. Of the fifty-four members who composed the first House under responsible Government nineteen only were in the last Parliament, and of these only four supported the Government in the measure upon which they were defeated. What would be thought of a House of Commons if, at the present moment, its members consisted of not more than one-third of those who were members four years since, and if among these there were found only one-fifth who gave their support to the present Government? Yet such is the actual state of things in *New South Wales* at the present moment, and we confess to serious misgivings as to the result of the appeal to the country which is now taking place.

"'Universal suffrage,' as it has been truly stated by the leading journal in Sydney, 'has given superiority of political power to the moveable population; and this is not all, for the working of that suffrage has tended to depress the character of the Legislative Assembly. Colonists who knew what was the character of legislative men of former times are, it is said 'painfully impressed' with the 'deterioration' which has taken place. The facility with which men obtain the confidence of the electors is a point to which we have upon various occasions alluded when commenting upon the state of things in Victoria, and in the elder colony of *New South Wales* the same extraordinary credulity or 'gullibility' appears to exist in the minds of the people. 'Men,' says the *Sydney Morning Herald*, 'who have never in social or political life performed any service to the country, whose education is of the meanest kind, who would not be trusted in any position demanding either intelligence or integrity,—men who promise largely, who denounce unsparingly, who pledge and promise without reserve whatever may seem to benefit the masses, however impossible,' are those who succeed in gaining the confidence and the suffrages of the electors."

IV.—*Bank Failures in the United States in November, 1860, consequent on the Secession Movement.*

THE following paragraph from the *Times*, of 6th December, 1860, contains an outline of the earlier statements which reached this country as regards the financial effect in the United States of the great Secession Schism, occasioned by the election of Mr. Lincoln, as President, in October 1860:—

“The private telegrams from New York to-day, with six days' later news, show already a considerable recovery in the stock market. Erie had further advanced from 28 to 31, New York Central from 73 to 76½, and Illinois Central from 55 to 58. The banks also were discounting freely, having agreed to protect each other by making common cause with their stock of bullion. The accounts, however, of the rates of exchange are rather of a confused character. One telegram says the quotation was not higher than 103, notwithstanding all the efforts of the banks; another says that the range was from 100 to 107, and another that bills were still almost unsaleable. If the price of 100 was only for inferior descriptions, and 107 was the charge for bankers' draughts, then there would be no advantage on gold from this side except in cases where persons might be willing to run risks.”

“The announcement of the bank failures, so far as regards those in the *Southern States*, has, of course, created no surprise, as the advices by the ‘Atlantic’ had mentioned that nearly the whole of these establishments were likely to break down. The correctness of the statement that the Philadelphia banks have all stopped, is open to great doubt. Pennsylvania, although the nearest to the line of Slave States, is not likely to have suffered much more than the other Northern States from the political alarm, and it is hard to suppose that her banking system has become so unsound that the whole of the twenty banks at *Philadelphia*, representing an aggregate capital of 2,400,000*l.*, can have been forced to an instantaneous stoppage. Among the twenty banks of that city, there is one called the Philadelphia Bank, with a capital of 360,000*l.*, and possibly this establishment only may be intended. The largest bank in the city is the Farmers' and Mechanics', with a capital of 400,000*l.*

“At *Washington* there are three banks—the Bank of the Metropolis, the Patriotic Bank, and the Bank of Washington, and, possibly, here also it is only the Bank of Washington that is referred to. Their respective capitals are small, averaging about 60,000*l.*, and their note circulation is about 40,000*l.* At the other points, doubtless, the suspension has been general.

“At *Baltimore*, in Maryland, there are seventeen banks, with a total capital of 2,100,000*l.*, and an aggregate note circulation of 600,000*l.*, the largest of them being the Merchants' Bank, with a capital of 300,000*l.*

“At *Norfolk*, in *Virginia*, there are three banks—the Bank of Virginia, with a capital of 40,000*l.*; the Exchange Bank, with 80,000*l.*; and the Farmers', with 60,000*l.* In the entire state of Virginia the banking capital is large, the number of establishments being sixty-eight, and the total capital 3,670,000*l.* With the exception, however, of the Farmers' Bank of Richmond, reported by the previous steamer, those above mentioned are the only Virginia ones yet announced.

“At *Charleston*, South Carolina, there are nine banks, with an aggregate capital of 1,375,000*l.*, and a circulation probably of about 800,000*l.* In this city, however, according to the present telegram, the banks have only ‘partially stopped payment.’

“Of course, as regards the Northern States and the bullion crisis, the difficulty will be more speedily terminated in proportion as the Southern Bank suspensions are more general, since, when a stoppage has taken place, there are no more struggles for a supply of specie. The vital question will be as to the ability of the *New Orleans banks*, their total capital being nearly 5,000,000*l.*, with a note circulation of 2,000,000*l.* It has usually been their practice to keep a strong

supply of specie, and, as the disunion movement does not seem to have been so strong in Louisiana as in some of the other states, there is an expectation that in that quarter they may be able to support themselves.”

V.—*Preventible Mortality in Lancashire and elsewhere.—Statement by Mr. Edwin Chadwick.*

THE following important passage is taken from the very able address of Mr. Edwin Chadwick before the Public Health Section of the Social Science Meeting at Glasgow, in September last (1860).

“Being impressed with the extent of evil affecting the labouring classes, developed in the course of their investigations, the common elements of which are unknown or unattended to, the foreign members of the International Statistical Congress which recently met in London, composed chiefly of men holding high permanent deliberative or executive offices under their respective governments, amongst whom were M. Quetelet and M. Visschers, of Belgium, M. Legoyt, of France—in all, fifty delegates—signed a declaration in the following terms, to which they requested the signature of Miss Florence Nightingale at their head:— ‘The Congress commends to the attention of statesmen, of economists, of philanthropists, and of administrators the study of the general condition of the labouring classes, of their wants, of their resources, and of the measures for the promotion of their welfare.’

“I will not stay to comment on the fact of the elements affecting the condition of the great mass of the prominent labouring classes being declared by such high international authorities to be at this time really a new subject of study, as for practical purposes it will be found to be; but I will refer to a recent speech of an eminent political leader, made on the occasion of the foundation of a ragged school in our chief manufacturing county, in which speech he congratulated the meeting on its vast progress in physical improvement of the people, of their comforts and their clothing, as a consequence of the increase of manufacturing and commercial prosperity. ‘Nor is there,’ he said, ‘any more certain test than the rapid increase of a population, of the physical well-being of a country.’ I should have been very glad if in official reports this proposition were not proved to be wholly erroneous in its unrestrained generality, and were it not proved to be so in respect to that particular county, Lancashire, where you may frequently see similar congratulatory expressions from persons of opposite political persuasions. But it should have presented itself for inquiry, why, with so much material progress, are masses of children there, ragged and in a state of destitution, claiming the aid of charity? Mr. Edward Tuffnell, who has the superintendence of the reformatories, reports that *sixty-five per cent.* of the children found there are *orphans*. And whence this mass of orphanage? and, in Liverpool and Manchester, an excessive mass of *widowhood*, as shown by the reports, corresponding with the excessive death-rates there? The answer given on investigation is, that it arises mainly from the excess of *preventible mortality from typhus, dysentery, and other filth diseases*, which are banished from common lodging-houses, but which are rife in the cesspool-tainted houses in which the operatives are crowded, to be near their work, and for which they pay enormously high rents, on account of the monopoly of the positions.

“The members of the International Statistical Congress would recognize the fact, that a *death-rate* represents the relative amount and sum of human suffering, and is one of the best tests of the physical progress of a country. In population, as well as manufacturing prosperity, the progress of Lancashire has been the highest, and yet the physical condition of its whole population, as determined by

that test, and especially of the working population, is really the *lowest*. Recent statistics, showing the condition of the different classes of the population, have been applied for, and have not been obtained; but from the present state of the general death-rate, it may be confidently averred that their relative position has little changed. The following statistical return, which I gave in my report on the sanitary condition of the labouring population of Great Britain, and which was confirmed by the subsequent investigations of Dr. Lyon Playfair in Lancashire, shows the relative sanitary condition of such *rural districts* as those from whence the strength of the country is drawn, as contrasted with the effects of the insanitary conditions of *towns* where it is absorbed:—

Average Age of Death.

	In Manchester.	In Wiltshire.
	Years.	Years.
Professional persons and gentry, with their families....	38	50
Tradesmen and their families (in Wiltshire, farmers } and graziers are included with shopkeepers)..... }	20	48
Mechanics, (agricultural) labourers and their families	17	33

“ Towns which were formerly in the relative sanitary condition probably that rural towns are now in, which have much open space, have, as Dr. Lyon Playfair shows, deteriorated in the physical condition of their population; and how should it be otherwise for high wages will not ward off the effects of confinement in crowded and heated factories, which are ill-ventilated; nor sleeping at night in close, ill-ventilated rooms, in an atmosphere which is a compound of that of a chimney and a privy. Indeed, it is a matter of experience, that when manufacturing prosperity has had a check, and the workmen are thrown out of employment in large numbers, the fever wards of the hospitals of the manufacturing towns are immediately thinned, and this for the simple reason, that the men are out of the crowded rooms, and, though living on less and simpler food, they are at large in the less impure air of the open streets.

“ Dr. Lyon Playfair reported that—‘The great *infantile* mortality occurs, for the most part, among the poorer part of the population, as is seen from an examination of the return from Preston:—

Gentry	18 per cent. of deaths under 5.
Tradesmen	36 ” ”
Operatives	55 ” ”

This may account in a great measure, for the following very startling table, drawn up by Mr. Cartwright. It will be observed, that while in 1783 the *average age of death* was 31 years in Preston, and the percentage of *infantile mortality* 29 per cent., the average age of the same town at the present time is reduced to 19½ years, in proportion to the increase of population.

“ Similar results attend the examination of the parochial registers of other towns. Thus, I find, by an analysis of the registration books of St. Nicholas Church, in Liverpool, that a *diminution* of the average age of death has occurred: from 1784 to 1810 the mean age at death varies from 24 to 26 years; but during the last seven years it varies from 17 to 20 years.’

Table showing the Average Age of Death of all Classes in Liverpool from 1784 to 1810, and in the Years 1841-2.

	1784-1810.	1841-2.
	Years.	Years.
Gentry	43	43
Tradesmen	23½	19
Operatives	18½	16
All classes	25	20

“ The like proportions will be found to prevail in other manufacturing towns. The lives of the *adult workmen* there are also relatively shortened, and Dr. Lyon Playfair, after giving a table showing this, thus recapitulates some of the results in physical deterioration in Lancashire, such as now goes on in our manufacturing towns in general:—

“ The table gives the general result, that there are every year in Lancashire 14,000 *deaths* and 398,000 *cases of sickness*, which might be prevented; and that 11,000 of the deaths consist of adults engaged in productive labour. It further shows that every individual in Lancashire loses *nineteen years*, or nearly one-half of the proper term of his life; and that every adult loses more than ten years of life, and from premature old age and sickness much more than that period of working ability. Without taking into consideration the diminution of the physical and mental energies of the survivors, from sickness and other depressing causes: without estimating the loss from the substitution of young and inexperienced labour for that which is skilful and productive; without including the heavy burdens incident to the large amount of preventible widowhood and orphanage; without calculating the loss, from the excess of births, resulting from the excess of deaths, or the cost of maintenance of an infantile population, nearly one-half of which is swept off before it attains two years of age, and about 59 per cent. of which never become adult productive labourers; and with data, in every case, much below the truth,—I estimate the *actual pecuniary burden* borne by the community, in the support of *removeable* disease and death, in Lancashire alone, at the annual sum of *five millions of pounds sterling*. I would draw attention to the columns representing the numbers of preventible cases of death and sickness in Liverpool and Manchester, or in any other of the large towns, to show the immense amount of misery which might be saved by proper sanitary arrangements.

“ ‘It has been stated,’ Dr. Playfair continues, ‘by Mr. Chadwick, that the annual slaughter, from one disease alone—typhus—a disease which formerly raged in, but is now banished, as an epidemic, from our prisons and our navies, is greater in England and Wales than the loss sustained by the allied armies at the battle of Waterloo. Yet what sort of battle do we here find fought and won by preventible disease against the population of the county of Lancaster? The labouring population of this county have always supplied a large contingent to the armies of the country. It furnished the strength of the army which fought at Flodden; and Cromwell, speaking of his Lancaster regiment, said, finer soldiers were never seen on a battle-field. The Guards, until recently, were largely recruited from Lancashire. What would be thought of a war in which 5,000 of the able-bodied men of one county fell every year in battle?—and yet this is only one-half the number annually slaughtered in that county by removeable epidemics! Yet this annual loss of able-bodied men, so much greater than the most cruel of known wars in modern times, is scarcely more severe than the loss sustained by the continued physical deterioration of the survivors. It was a matter of constant complaint to me, by the recruiting officers in the various districts of the county, that the sons are less tall than their fathers; and that the difficulty is constantly increasing of obtaining tall and able-bodied men.

“ I found the indications of recruiting officers often shrewd and useful; but, without one exception, they complained of the difficulty of getting men ‘to pass the surgeon’ in this county. As an example, I may adduce the evidence of Sergeant Farrell, of the 47th Regiment:—

“ ‘Have you long been engaged in the recruiting service?’

“ ‘For nearly ten years.’

“ ‘Do you find it equally easy to recruit in Lancashire now as formerly?’

“ ‘Where I could get *ten recruits formerly*, that I could venture to send up, I can now only get one, and that one is often rejected. Out of seven I got lately, only one passed.’

“ ‘Do you think that this difficulty arises from people getting better wages at factories than in the army?’

“ ‘No, not at all. When persons go to work so soon, they do not grow up to be the proper size, they have always some deformity, and in the towns, somehow or other, they are pale, sickly, and thin in flesh. The only place where I can get good men is from the country districts.’

“ ‘What reason does the surgeon assign for refusing the men you send from the towns?’

“ ‘For being too thin, not being round-chested, and not standing straight.’

“ ‘From what towns do you find it most easy to procure good men?’

“ ‘I have been only in Yorkshire, Somersetshire, and Bristol. In Yorkshire there are some good men, better than I have found in Lancashire, but they are by far the best in Somerset. In that and other country districts I could easily get good men; but here, in Recldale, there is almost no use in staying. I have only been able to pick out thirty good-looking men for the last eighteen months, and out of these only one was passed by the surgeon for every four rejected.’

“ Dr. Lyon Playfair continues—‘Through the politeness of the head recruiting officer of the Liverpool district, which includes Lancashire, Cheshire, and parts of Shropshire, Derby, North Wales, and Staffordshire, I have obtained returns of the number of persons sent up from various districts, and rejected as unfit for service. The total number sent for inspection from all the districts to the staff surgeon in Liverpool, between the 1st of January, 1843, to 31st October, 1843, was 1,560, of which 876 were approved, 684 being rejected. In Liverpool, during the same time, 930 were presented for examination, 439, or 47 per cent. being rejected.’

“ There has been one check to the rapid physical deterioration in the manufacturing districts, in respect to the overworking of children, which I shall subsequently notice. But it is right to state that the insanitary conditions are attended with moral as well as physical deterioration; crime following most closely those conditions, where there is a perception of the short duration of life, and where the appetites for immediate enjoyment amongst the ill-educated and ill-trained are strong and reckless. Thus, taking the counties in the order of their sanitary condition—those first where the *death-rates are the lowest*—and dividing them into groups, the relative proportions of crime to each ten thousand of the population are as follows:—

	Proportion of Crimes of Violence and Passion.	Proportion of Crimes against Property with Violence and Malice.	Proportion of Crimes against the Public Peace.	All Other Crimes.
The fourteen <i>least unhealthy</i> counties	40	1·00	·90	13·69
The fourteen <i>intermediate</i> counties	60	1·73	1·60	15·51
The fourteen <i>least healthy</i> counties	66	1·69	2·50	17·75
Let us take the two extreme single counties:—				
The <i>most healthy</i> county (Westmoreland).....	17	1·71	2·47	2·48
The <i>most unhealthy</i> county with the highest manufacturing prosperity and wages (Lancashire)	61	1·91	4·17	20·27

“ The *average age of death* of all who arrived at the adult stage was in Westmoreland, 58 years and 10 months; whilst in all Lancashire, that is to say, including also all the agricultural population of the county, it was 50 years and 2 months.

“ The identity of the seats of disease and physical deterioration with the seats of moral deterioration and of crime, in the midst of manufacturing prosperity, was displayed in the Report on Preston to the Health of Towns Commissioners by the late Rev. Mr. Clay, the chaplain of the County Gaol at Preston; and the effect of sanitary measures in the reduction of crime is shown by Mr. May, of the Town Clerk’s Office, Macclesfield, in the paper printed in the transactions of the Association, giving an account of the first effects of sanitary measures in that town. Worthy persons in Lancashire, who have done much for the improvement of the working classes themselves, but generalising hastily from particular instances, have, in political speeches and papers, boasted of the progress of the population, and a relative superiority in intelligence: the answer to which is, the fact of their low physical condition, and the continued disregard of the expositions for the removal of the causes. But what do we find the actual general intellectual position of the county to be in reality? According to the last of the returns of the Registrar-General, whilst the proportions of persons signing the marriage registers with marks only, were, in all England—males, 27·7 per cent.; females, 38·8 per cent.;—in Lancashire it was—males, 30 per cent.; females, 56 per cent. The progress of education, in the reduction of the number of marksmen to these yet high proportions, has been less than one per cent. per annum, so that at the present rate it will take more than half a century to fit the female population to impart to their children the lowest elements of education. In the adjacent district of the West Riding, which follows in manufacturing prosperity, Leeds has a death-rate of 30 in a 1,000, with an infantile slaughter before the attainment of their fifth year of half of all born; and what is its real educational position and progress? In 1839, the proportion of females married, who could not write their own names, was 52 per cent.; in 1857, it was still 50 per cent.

“ Whilst, then, in the county most referred to for physical progression, we find the proof, when examined, of a vastly increased population, and high prosperity and high wages, is attended with excessive physical and moral deteriorations;—in Ireland there was the example of an increase of population attended with—poverty,—and under insanitary conditions, physical deteriorations. Thus, in four counties of

Ireland where the increase of the population was the greatest—there, where 61 per cent. of the habitations were mud hovels, having only one room—there the annual proportion of deaths from epidemic diseases was 47·8 per cent., and the average age of death was only 26 years and 8 months; whilst in the four counties where the rate of increase of population was only one-half, where there were only 29 per cent. of single-roomed mud-hovel habitations; there the deaths from epidemic disease were 35·5 per cent., and the average age of death 33 years and 4 months. As amidst our English town populations, heaped together in single rooms, so in the four counties where the labouring classes are living in the greatest proportion in single-roomed mud hovels, and where there is the largest increase of population, there also there is corresponding moral deterioration, and just double the average of crimes of violence and of passion.

“It is right to state, in relation to these instances, to guard against erroneous political speculation, that in New York and other American cities, the insanitary conditions and overcrowding is often as great; as also, according to the information I have received, the death-rates and the physical deterioration, although population and wages increase even more rapidly than in our manufacturing districts. Thus, Mr. William Chambers states:—‘In New York there is a place called the Five Points, a kind of St. Giles’s; and here, and in some other quarters of this great city, you see and hear of a sink of vice and misery resembling the more squalid and dissolute parts of Liverpool or Glasgow. For this the stranger is not prepared by the accounts he has received of the condition of affairs in America. Wages of manual labour, a dollar to two dollars a-day. Servants, labourers, mechanics, wanted. The rural districts crying for hands to assist in clearing and cultivating the ground. Land to be had for the merest trifle. The franchise, too, that much-coveted boon, offered to all. From whatever cause it may originate, New York is beginning to experience the serious pressure of a vicious and impoverished class. Prisons, hospitals, asylums, juvenile reformatories, almshouses, houses of refuge, and an expensive, though strangely ineffective police, are the apparatus employed to keep matters within bounds. The governors of a cluster of penal and beneficial institutions report that in 1852 they expended 465,109 dollars in administering relief to 80,357 persons. Passing over any notice of the many thousands, including crowds of recently arrived immigrants, assisted by other associations, we have here a number equal to one in seven of the population coming under review as criminals or paupers in the course of the year—a most extraordinary thing to be said of any place in a country which offers such boundless opportunities for gaining a respectable subsistence.’

“In this, and in other American cities, the conditions of such districts are as little known as our own to the more respectable classes of inhabitants, and the terms of the resolution of the International Statistical Congress would be applicable to a greater extent than might be conceived. When we sent inspectors from the General Board of Health, upon petitions, to examine the sanitary conditions of towns, one of the instructions we gave them was, that they should endeavour to get mayors, town councillors, and particularly those who were opposed to the introduction of the law, to accompany them in their inspections. In our report laid before Parliament, we thus referred to these inspections:—‘A further common and important feature observed in the local inspections has been the discovery, by the chief inhabitants, or those holding leading local position and office, who accompanied the inspector in his perambulation, how little they themselves knew of the real condition of their own town, or of those portions of it which are occupied by the majority of the inhabitants. The places properly designated as ‘fever nests’ the seats of epidemics, it appeared had never been visited by them, and were almost as much unknown to them as any foreign territory which they had never seen. On these occasions they frequently acknowledged frankly, that they had been, until then, entirely unaware of the condition of the places visited. The town clerk of one town, writing to the inspector, states, that they were unaware, until his visit and report, what the condition of their town really was.’”

ABSTRACT OF THE REGISTRAR-GENERAL'S RETURN
OF THE
MARRIAGES IN ENGLAND AND WALES DURING THE THIRD QUARTER
(JULY—SEPTEMBER), AND OF THE BIRTHS AND DEATHS DURING
THE FOURTH QUARTER (OCTOBER—DECEMBER), OF 1860.

THIS Return comprises the BIRTHS and DEATHS registered by 2,197 Registrars in all the districts of England during the autumn quarter that ended on December 31st, 1860; and the MARRIAGES in 12,449 churches or chapels, about 4,342 registered places of worship unconnected with the Established Church, and 631 Superintendent Registrars' offices, in the quarter that ended on September 30th, 1860.

The Quarterly Returns are favourable, and imply that the population was not only more prosperous but healthier than usual. Births slightly decreased, but Marriages became more frequent, and the mortality fell below the average. The improvement in health was greatest in the town districts.

The accounts of births and deaths for the year 1860 show an increase of the birth and a decrease of the death-rate.

MARRIAGES.—81,144 persons married in the quarter that ended on September 30th; and the marriage-rate was 1·608, or higher than in any corresponding quarter since 1856, but slightly below the average of ten summer quarters.

The increase of marriages was most striking in London and Lancashire,

BIRTHS.—162,248 children were born and registered in the last quarter of the year 1860; or more by 4,286 than were registered in the last quarter of 1858,

ENGLAND:—MARRIAGES, BIRTHS, and DEATHS, returned in the Years
1854-60, and in the QUARTERS of those Years.

Calendar YEARS, 1854-60;—Numbers.

Years	'60.	'59.	'58.	'57.	'56.	'55.	'54.
Marriages No.	—	167,723	156,070	159,097	159,337	152,113	159,727
Births..... „	683,430	689,881	655,481	663,071	657,453	635,043	634,405
Deaths..... „	422,500	441,249	449,656	419,815	390,506	425,703	437,905

QUARTERS of each Calendar Year 1854-60.

(I.) MARRIAGES:—Numbers.

Qrs. ended last day of	'60.	'59.	'58.	'57.	'56.	'55.	'54.
March .....No.	35,198	35,382	29,918	33,321	33,427	29,186	33,234
June „	43,833	42,042	39,890	41,267	38,820	38,549	40,518
Septmbr..... „	40,572	39,803	38,599	38,669	39,089	37,308	38,182
Decmbr. „	—	50,496	47,663	45,840	48,001	47,070	47,793

QUARTERS of each Calendar Year, 1854-60.

(II.) BIRTHS:—Numbers.

Qrs. ended last day of	'60.	'59.	'58.	'57.	'56.	'55.	'54.
March .....No.	183,206	175,532	170,959	170,430	169,250	166,225	160,785
June „	173,914	175,864	169,115	170,444	173,263	165,277	172,457
Septmbr. „	164,062	168,394	157,445	161,181	157,462	154,700	154,724
Decmbr. „	162,248	170,091	157,962	161,016	157,478	148,841	146,439

(III.) DEATHS:—Numbers.

Qrs. ended last day of	'60.	'59.	'58.	'57.	'56.	'55.	'54.
March .....No.	122,642	121,682	125,819	108,665	103,014	134,542	111,843
June „	110,878	105,778	107,142	100,046	100,099	106,493	102,586
Septmbr. „	86,423	104,339	98,142	100,528	91,155	87,646	113,843
Decmbr. „	102,557	109,450	118,553	110,576	96,238	97,022	109,633

and 7813 less than the number in the last quarter of 1859. The birth-rate of the quarter was 3.203; the average of the quarter being 3.232.

683,430 children were registered in the year 1860; and the annual birth-rate was 3.418, making .014 above the annual average. Taking one day with another through the year, 1,867 children were born daily.

INCREASE OF POPULATION.—The births exceeded the deaths in the quarter by 59,691, and that was the natural increase of the population.

In the year the natural increase of England and Wales was 269,930 souls; 713 daily. If Scotland and Ireland increased at the same rate the natural increase of the population of the United Kingdom must have been at the rate of 1,069 daily.

Emigration carried off a part of the increase. In the quarter about 7,074 English emigrants sailed from the ports at which there are Government Emigra-

ENGLAND:—Annual Rate Per Cent. of PERSONS MARRIED, BIRTHS, and DEATHS, during the YEARS 1854-60, and the QUARTERS of those Years.

Calendar Years, 1854-60:—General Percentage Results.

YEARS	'60.	Mean '50-'59.	'59.	'58.	'57.	'56.	'55.	'54.
Estmd. Popln. of England in thousands in middle of Year.....	19,994,	—	19,745,	19,523,	19,305,	19,045,	18,787,	18,619,
Persons Married Per ct.]	—	1.692	1.700	1.598	1.648	1.674	1.620	1.716
Births „	3.418	3.404	3.492	3.357	3.435	3.452	3.380	3.407
Deaths.... „	2.113	2.218	2.235	2.303	2.175	2.050	2.266	2.352

QUARTERS of each Calendar Year, 1854-60.

(I.) PERSONS MARRIED:—Percentages.

Qrs. ended last day of	'60.	Mean '50-'59.	'59.	'58.	'57.	'56.	'55.	'54.
March....Per ct.	1.420	1.416	1.462	1.248	1.408	1.416	1.266	1.456
June..... „	1.762	1.704	1.712	1.642	1.714	1.638	1.648	1.750
Septmbr. „	1.608	1.630	1.602	1.566	1.592	1.626	1.574	1.626
Decmbr. „	—	2.000	2.020	1.930	1.876	1.990	1.978	2.030

(II.) BIRTHS:—Percentages.

Qrs. ended last day of	'60.	Mean '50-'59.	'59.	'58.	'57.	'56.	'55.	'54.
March...Per ct.	3.693	3.554	3.621	3.567	3.600	3.585	3.603	3.520
June „	3.495	3.558	3.577	3.480	3.548	3.656	3.534	3.722
Septmbr. „	3.250	3.278	3.377	3.195	3.308	3.275	3.261	3.294
Decmbr. „	3.203	3.232	3.402	3.198	3.295	3.264	3.128	3.111

(III.) DEATHS:—Percentages.

Qrs. ended last day of	'60.	Mean '50-'59.	'59.	'58.	'57.	'56.	'55.	'54.
March...Per ct.	2.472	2.460	2.512	2.625	2.295	2.182	2.916	2.449
June..... „	2.228	2.195	2.153	2.205	2.083	2.112	2.277	2.214
Septmbr. „	1.712	2.042	2.093	1.992	2.063	1.896	1.848	2.423
Decmbr. „	2.024	2.182	2.189	2.400	2.263	1.995	2.039	2.329

tion Offices; nearly in equal proportions to the United States and the Australian colonies.*

PRICES, THE WEATHER, AND PAUPERISM.—The scarcity or the abundance of the principle articles of food is shown by their prices.

Wheat was 56s. 9d. a quarter; or 31 per cent., higher in price than it was in the corresponding quarter of 1859. Beef at the Leadenhall and Newgate Markets was sold, by the carcase at 4½d. a pound; or nearly ½d. less. Mutton was on an average 5¾d. a pound, and remained the same as in the last months of 1859. The potato crop partially failed; and York Regents, at the Waterside Market, were sold at 122s. 6d. a ton; or at the rate of 1½ lb. for a penny. The price of this universal article of food rose progressively in the last three months of the three

* From a Return with which the Registrar-General has been favoured by the Emigration Commissioners: the number returned as of English origin was 4,959, while the birthplace of 7,185 emigrants was not distinguished; in the above statement a proportional number of these have been added to those returned as of English origin.

years 1858-59-60 from 87s. 6d. to 102s. 6d. and 122s. 6d. a ton. To supply its deficiency other antiscorbutic vegetables, fruit, or herbs are required.

The meteorology of the season was peculiar, and is fully described by Mr. Glaisher. The season was unusually cold; and on December 18th, and afterwards, the cold became intense. On Christmas Day, 25th, the temperature of the air fell to 7°, on the 29th to 8° Fahrenheit. The extreme temperatures varied in different parts of the country; thus on Christmas Day the temperature fell in Guernsey to

CONSOLS, PROVISIONS, PAUPERISM, and TEMPERATURE, in each of the nine QUARTERS ended 31st December, 1860.

1 Quarters ending	2 Average Price of Consols (for Money).	3 Average Price of Wheat per Quarter in England and Wales.		4 5 Average Prices of Meat per lb. at Leadenhall and Newgate Markets (by the Carcase), with the Mean Prices.		6 Average Prices of Potatoes (York Regents) per Ton at Waterside Market, Southwark.	7 8 Pauperism.		9 Mean Tem- per- ature.
		Average Price of Wheat per Quarter in England and Wales.	Average Price of Wheat per Quarter in England and Wales.	Beef.	Mutton.		Quarterly Average of the Number of Paupers relieved on the last day of each week.		
							In-door.	Out-door.	
1858 31 Dec.	£ 98½	s. d. 41 9	d. d. d. 4—6½ 5¼	d. d. d. 4¼—6¾ 5½	s. s. s. 80—95 87	115,751	710,904	43·8	
1859 31 Mar.	95½	40 8	4¼—6¾ 5¾	4¼—7 5⅞	80—100 90	122,854	742,964	43·3	
30 June	92½	47 3	4¼—6½ 5⅝	5—7 6	85—110 97	109,150	710,410	53·7	
30 Sept.	95¾	44 0	4¼—6¼ 5¼	4¼—6¾ 5¾	65—105 85	100,582	682,867	62·8	
31 Dec.	96½	43 4	4—6½ 5¼	4¼—6¾ 5¾	85—120 102	109,429	683,962	43·3	
1860 31 Mar.	94½	44 5	3¾—6½ 5½	4¼—6¾ 5¾	115—145 130	118,523	717,264	38·8	
30 June	94½	52 8	4¼—6¾ 5¾	5½—7½ 6½	125—160 142	107,050	692,384	50·5	
30 Sept.	93¼	59 1	4¼—7 5⅝	5¼—7½ 6⅝	125—145 135	101,680	667,680	56·2	
30 Dec.	93¼	56 9	3½—6¼ 4⅞	4¼—6¾ 5¾	115—130 122	115,158	673,680	42·6	

Col. 6 is deduced from the Weekly Tables published in the *Economist*. The average of the highest and of the lowest weekly prices is here shown in cols. 4, 5, and 6, and not the absolute highest or lowest price quoted at any period of the quarter.

Cols. 7 and 8 are deduced from the Returns of the Poor Law Board. The Returns now relate to 645 Unions, &c., comprising a population of 17,670,935 (in 1851), and do not include the paupers of parishes, &c., incorporated under Gilbert's Act, or still under the 43rd Elizabeth; Lunatic Paupers in Asylums and Vagrants relieved in the above Unions are also excluded. They amounted on January 1st, 1858, to—Insane Persons, 19,487; Vagrants, 2,265. The rest of the paupers on that day amounted to 880,280.

30°, Helston to 32°, Truro to 26°, Ventnor to 24°, and on the south coast to 17° and 20°; these temperatures gradually decreasing in the latitude of 51½° to 6°, 7°, and 8°; and further north to zero; at Nottingham the lowest reading was noted as 8° below zero; further north than 54° of latitude the readings increased to 12° at Alnwick, and 16° at Scarborough.

The atmospheric pressure was also low, and a large amount of rain fell in December; the quantity varying in different parts. The rain-fall of the year at Greenwich was 32· in., at Truro 50·7 in., at Barnstaple 50·0 in., at Lampeter 54·3 in., at Stonyhurst 50·4 in., the four highest; at Liverpool 26·7 in., Grantham 28·1 in., Gloucester 28·1 in., Rose Hill (Oxford) 25·4 in.; the London Stations, Battersea, Whitehall, and Guildhall, 27·7.

Pauperism gradually declined; and the paupers fell from 826,000 to 793,391 and 788,838 receiving relief on an average during the last quarters of the years 1858-59-60.

STATE OF THE PUBLIC HEALTH.—102,557 deaths were registered in the last quarter of the year 1860, and the annual rate of mortality during the season was 2·024. The mortality was 0·158 below the average.

Upon making up the account for the year the deaths are found to be 422,500; and the annual rate of mortality 2·113; or a little more than 21 in 1,000. The average of the preceding ten years is 22. So one life in every 1,000 living was saved.

Yet the mortality of England and Wales is still greatly in excess of the rate experienced in the least unhealthy districts. The deaths instead of 102,557 would at that rate have been 79,283; so during the 92 days 23,274 persons died unnatural deaths in the least unhealthy country in Europe.

The densest districts are still the unhealthiest. In the population of town districts exceeding eight millions at the last census, the mortality was at the rate of 23 in 1,000; in the country districts, of more than nine millions, the rate of mortality was 18 in 1,000; so the chances of dying in the two groups of districts were as 23 to 18. There is a wide field open for sanitary improvement in the country as well as in towns, and it is gratifying to find that the progress is now evident; for the mortality of the town districts has declined from 25 to 23, and of the country districts from 19 to 18.

Upon looking at the country generally we find that the epidemic diphtheria still prevails in parts of the kingdom; measles, whooping-cough, small-pox, scarlatina, fever are also so frequently mentioned in the Registrar's notes that they may be considered prevailing epidemics.

It is the characteristic of these zymotic diseases that they do not depend upon general atmospheric conditions, but are often very fatal in one community, while they are entirely absent from another in the same climate.

In LONDON the mortality was below the average; the deaths were 15,197.

In the SOUTH EASTERN COUNTIES, Surrey, Kent, Sussex, Hampshire and Berkshire, the mortality was much below the average of the same season of the two preceding years; the deaths were 8,163.

In the SOUTH MIDLAND COUNTIES 6,020 persons died; the mortality in nearly every county being below that of the two preceding years.

In the SOUTH EASTERN COUNTIES 5,290 deaths were registered; less by five hundred than in the corresponding quarter of the previous year.

The deaths (8,303) in the SOUTH-WESTERN COUNTIES were less by 1,800 than the deaths in the corresponding quarter of 1858. The reduction was observed in all the counties, Wilts, Dorset, Devon, Cornwall, and Somerset.

The 12,019 deaths in the WEST MIDLAND COUNTIES show an improved state of health, for the number is less by 2,528 than the deaths in the autumn quarter of 1858; and the reduction is evident in every county. Bristol, Cheltenham, and Birmingham were comparatively healthy, and so were the usually insalubrious districts of South Staffordshire.

In the NORTH MIDLAND COUNTIES the reduction of mortality was great; the deaths from 7,986 in 1858 fell to 5,887. Each county and nearly every district exhibited improvement. In Nottingham the deaths fell from 732 in 1858 to 414.

The mortality was exceedingly high; and it has now fallen within the usual limits. The diminished fatality is ascribed by the Registrars to sanitary arrangements, and to the judicious activity of the health officers. Measles have been fatal in thirty-four cases at Derby; where the total deaths were 297.

DEATHS in the Autumn Quarters, ended December 31st, 1853-60.—Numbers.

DEATHS, &c.	1860.	Total 1850-59, (10 Years.)	1859.	1858.	1857.	1856.	1855.	1854.	1853.
In 125 Districts and 23 Sub-districts, comprising the Chief Towns	56,338	557,581	57,427	65,596	60,132	52,086	51,985	59,660	57,633
In the remaining Districts and Sub-Districts of England and Wales, comprising chiefly Small Towns and Country Parishes ...	46,219	477,716	52,023	52,957	50,411	44,152	45,037	49,973	45,456
All England	102,557	1,035,297	109,450	118,553	110,576	96,238	97,022	109,633	103,089

AREA, POPULATION, DEATHS, and MORTALITY per Cent. in the Autumn Quarters, ended December 31st, 1850-60.

GROUPS.	Area in Statute Acres. (England.)	Population Enumerated. (England.)		Deaths in 10 Autumn Quarters, 1850-59.	Average Annual Rate of Mortality per Cent. of 10 Autumn Quarters, 1850-59.	Annual Rate of Mortality per Cent. in the Autumn Quarter 1860.
		June 6-7th, 1841.	March 31st, 1851.			
In 125 Districts, and 23 Sub-Districts, comprising the Chief Towns	No. 2,149,800	No. 6,838,069	No. 8,247,017	No. 557,581	Per ct. 2.494	Per ct. 2.269
In the remaining Districts and Sub-districts of England and Wales, comprising chiefly Small Towns and Country Parishes	No. 35,175,115	No. 9,076,079	No. 9,680,592	No. 477,716	Per ct. 1.920	Per ct. 1.789
All England	No. 37,324,915	No. 15,914,148	No. 17,927,609	No. 1,035,297	Per ct. 2.182	Per ct. 2.024

The deaths in the NORTH WESTERN COUNTIES were 17,207; the deaths being nearly the same number as in the year 1859 but less by 2,898 than in 1858. Those who have watched the progress of the health of Liverpool will observe with gratification that the mortality of the two districts of Liverpool and West Derby fell successively from 3,912 to 3,085, and to 2,993, in the last quarters of the three years 1858-59-60. The increase of deaths in the Dale Street sub-district is ascribed by the Registrar to the inclemency of the weather, and to the privations and diseases that are caused by intoxicating drinks. In Manchester and Salford there is a corresponding improvement. The young children which were formerly not attended by medical men in illness now obtain the advantages of medical advice, chiefly through the Registrar requiring a medical certificate of the cause of death. It is "a singular instance," Mr. Leigh says, "of a great and salutary change in the habits of a class, effected by a comparatively simple cause."

MARRIAGES Registered in Quarters ended 30th September, 1858-60; and BIRTHS and DEATHS in Quarters ended 31st December, 1858-60.

DIVISIONS. (England and Wales.)	AREA in Statute Acres.	POPULATION, 1851. (Persons.)	MARRIAGES in Quarters ended 30th Sept.		
			'60.	'59.	'58.
ENGLD. & WALES....Totals	37,324,915	17,927,609	40,572	39,803	38,599
I. London	78,029	2,362,236	7,707	7,119	6,950
II. South Eastern	4,065,935	1,628,416	3,184	3,256	3,107
III. South Midland	3,201,290	1,234,332	1,959	2,040	2,162
IV. Eastern	3,214,099	1,113,982	1,572	1,681	1,799
V. South Western	4,993,660	1,803,261	3,265	3,354	3,178
VI. West Midland	3,865,332	2,136,573	4,860	4,825	4,729
VII. North Midland	3,540,797	1,215,501	2,261	2,322	2,207
VIII. North Western	2,000,227	2,488,438	7,326	6,752	6,377
IX. Yorkshire	3,654,636	1,789,047	4,153	4,103	3,906
X. Northern	3,492,322	969,126	2,119	2,060	1,998
XI. Monmthsh. & Wales	5,218,588	1,186,697	2,166	2,291	2,186

DIVISIONS. (England and Wales.)	BIRTHS in Quarters ended 31st December.			DEATHS in Quarters ended 31st December.		
	'60.	'59.	'58.	'60.	'59.	'58.
ENGLD. & WALES....Totals	No. 162,248	No. 170,091	No. 157,962	No. 102,557	No. 109,450	No. 118,553
I. London	23,234	23,626	22,829	15,197	15,884	17,835
II. South Eastern	13,719	14,642	13,420	8,163	8,989	9,485
III. South Midland	9,959	10,617	9,945	6,020	6,829	6,273
IV. Eastern	8,351	9,252	8,531	5,290	5,787	5,967
V. South Western	13,455	14,693	13,613	8,303	9,556	10,102
VI. West Midland	20,317	21,377	20,002	12,019	13,679	14,547
VII. North Midland	10,571	11,259	10,115	5,887	7,054	7,986
VIII. North Western	24,909	25,584	23,402	17,207	17,089	20,105
IX. Yorkshire	17,617	18,002	16,444	11,686	11,684	12,534
X. Northern	9,951	10,158	9,789	6,299	6,154	6,157
XI. Monmthsh. & Wales	10,165	10,881	9,872	6,486	6,745	7,262

REMARKS ON THE WEATHER,

DURING THE QUARTER ENDING 31ST DECEMBER, 1860.

By JAMES GLAISHER, Esq., F.R.S., &c., Sec. of the British Meteorological Society.

With the exception of the last ten days in *October*, and the first ten days in *December*, the weather has been cold throughout the quarter. The deficiency of temperature was large about the 12th of *October*, was about 3° below the daily average in *November*, and was very large from the 18th to the 29th of *December*, the cold having been singularly severe between these days, exhibiting a great contrast to the weather at the beginning of the month. On *December* 5th and 6th the excess of temperature above the average was 9°; from the 18th to the 23rd it was from 7° to 10° below each day; as large as 15° on the 21th; 16° on the 25th; and 14° on the 29th. On the 7th day the temperature in the neighbourhood was as high as 54°, and on the 25th and 29th was as low as 7° and 8°. These latter temperatures are very remarkable for *December*.

Passing now to different parts of the country, on *Christmas Day* the lowest temperature at *Guernsey* was 30°; at *Helston* was 32°; at *Truro* 26° at *Ventnor* 24°; and on the south coast of *England* from 17° to 20°; these temperatures gradually decreased to 6°, 7°, and 8° in the latitude of 51½°; and to 0° (*Zero*) at lat. 51° 50'; was between 0° and -3° between the parallels 52° and 51°; at *Nottingham* the lowest reading was noted as -8°; and above the parallel 54° the readings gradually increased from 0° to 12° at *Alnwick*; the temperature at the *Isle of Man* was 15°; on the west coast of *Dumfries*, and the east coast of *England* from *Scarborough* to *Edinburgh*, being about 16°, the temperature of the sea being about 44° at the same time.

The range of temperature in *December* was very large at all places.

In the year 1816 the mean temperature of *December* was 32.9°, being 3.4° lower than the month just passed. The hottest *December* in the 20 years was 47.6° in the year 1852, which was 11.3° warmer than that of 1860.

The mean high day temperature in *October* was 58.6°, being ¼° above; of *November* was 46.7°, being 2.7° below; and of *December* was 40½° being 4.7° below their respective averages.

The mean low night temperature of *October* was 44½°, being 1° above; of *November* was 35¼°, being 2½° below; and of *December* was 31.9°, being ¾° below their respective averages.

The mean temperature of *October* was 1° above; of *November* was 2¾° below; and of *December* was 4° below their averages as found from the observations of the preceding 19 years.

The pressure of the atmosphere was slightly above its average in *October*, and below both in *November* and *December*, being smaller in *December* than in any *December* for 20 years.

The fall of *Rain* was slightly deficient in the quarter, and amounted to 32 in.

in the year. This was exceeded in the years 1821, 1824, and 1852, but is greater than in all other years since 1815, as is shown in the following table:—

FALL of RAIN at GREENWICH, in each Year from 1815 to 1860.

Years.	Fall of Rain.	Years.	Fall of Rain.	Years.	Fall of Rain.	Years.	Fall of Rain.	Years.	Fall of Rain.	Years.	Fall of Rain.
	Inches.		Inches.		Inches.		Inches.		Inches.		Inches.
1815	22.5	1823	27.1	1831	30.8	1839	29.6	1847	17.8	1854	18.7
'16	30.1	'21	36.3	'32	19.3	'40	18.3	'48	30.2	'55	21.1
'17	29.0	'25	24.6	'33	23.0	'41	33.3	'49	23.9	'56	22.2
'18	25.7	'26	23.0	'34	19.6	'42	22.6	'50	19.7	'57	21.4
'19	31.1	'27	24.9	'35	24.9	'43	24.6	'51	21.6	'58	17.8
'20	27.7	'28	31.5	'36	27.1	'44	24.9	'52	34.2	'59	25.9
'21	34.5	'29	25.2	'37	21.0	'45	22.4	'53	29.0	'60	32.0
'22	27.7	'30	27.2	'38	23.8	'46	25.3				

The mean temperature of the air at *Greenwich* for the three months ending *November*, constituting the three autumn months, was 48.3°, being 1.1° below the average of the preceding 89 years.

1860.		Temperature of								Elastic Force of Vapour.		Weight of Vapour in a Cubic Foot of Air.		
		Air.		Evaporation.		Dew Point.		Air—Daily Range.						
Months.		Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Water of the Thames.	Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.
Oct.	50.6	+1.2	+0.9	49.1	+0.9	47.6	+1.7	14.1	-0.5	51.6	In. .330	In. +.019	Gr. 3.7	Gr. +0.2
Nov.	40.8	-1.6	-2.7	39.9	-2.0	38.9	-1.3	11.4	-0.2	46.1	.237	-.019	2.7	-0.2
Dec.	36.3	-2.7	-4.0	35.2	-3.6	33.5	-3.6	8.6	-0.9	39.6	.192	-.035	2.2	-0.4
Mean.....	42.6	-1.0	-1.9	41.4	-1.6	40.0	-1.1	11.4	-0.5	45.8	.253	-.012	2.9	-0.1

1860.		Degree of Humidity.		Reading of Barometer.		Weight of a Cubic Foot of Air.		Rain.		Daily Horizontal Movement of the Air.	Reading of Thermometer on Grass.				
		Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Amnt.	Diff. from Average of 45 Years.		Number of Nights it was			Lowest Reading at Night.	Highest Reading at Night.
Months.		Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Mean.	Diff. from Average of 19 Years.	Amnt.	Diff. from Average of 45 Years.	Miles.	At or below 30°.	Between 30° and 40°.	Above 40°.	Lowest Reading at Night.	Highest Reading at Night.
Oct.	69	+ 2	In. 29.856	+174	Gr. 541	+ 2	In. 1.6	-1.2	260	3	15	13	27.0	50.7	
Nov.	93	+ 4	29.606	-.064	550	+ 3	2.5	+0.1	184	16	12	2	21.4	42.0	
Dec.	92	+ 3	29.491	-.330	551	- 1	2.8	+0.9	187	19	10	2	2.0	43.0	
Mean.....	91	+ 3	29.681	-.073	547	+ 1	Sum 6.9	Sum -0.2	Mean 210	Sum 38	Sum 37	Sum 17	Lowest 2.0	Highest 50.7	

Note.—In reading this table it will be borne in mind that the sign (-) minus signifies below the average, and that the sign (+) plus signifies above the average.

ENGLAND.—Meteorological Table, Quarter ended 31st December, 1860.

1	2	3	4	5	6	7	8	9
NAMES OF STATIONS.	Mean Pressure of Dry Air reduced to the Level of the Sea.	Highest Reading of the Thermometer.	Lowest Reading of the Thermometer.	Range of Temperature in the Quarter.	Mean Monthly Range of Temperature.	Mean Daily Range of Temperature.	Mean Temperature of the Air.	Mean Degree of Humidity.
NAMES OF STATIONS.	Mean estimated Strength.	Relative Proportion of				Mean Amount of Cloud.	RAIN.	
		N.	E.	S.	W.		Number of Days on which it fell.	Amount collected.
Guernsey	29.524	61.5	29.0	32.5	20.6	5.8	47.6	89
Exeter	29.583	65.2	15.9	49.3	28.0	9.4	44.4	91
Ventnor	29.580	63.0	22.0	41.0	29.0	6.9	43.0	—
Barnstaple	29.565	66.5	12.4	54.1	36.6	11.1	45.0	85
Royal Observatory	29.608	68.5	8.0	60.5	36.3	11.3	42.2	91
Royston	29.615	69.6	1.1	68.5	39.4	11.1	41.8	89
Lampeter	29.568	68.0	0.6	67.4	39.8	13.6	41.5	87
Norwich	29.616	65.0	1.0	64.0	37.0	9.8	42.2	91
Belvoir Castle	29.569	67.0	-1.0	68.0	37.8	10.7	41.4	86
Liverpool	29.610	62.4	16.2	46.2	26.1	7.3	43.4	85
Wakefield	29.609	65.2	-4.0	69.2	39.0	11.9	41.3	86
Leeds	29.627	63.0	3.0	60.0	35.2	10.9	42.1	87
Stonyhurst	29.558	59.9	6.7	53.2	31.9	7.9	41.3	85
Scarborough	29.656	58.0	16.0	42.0	28.6	5.1	42.2	87
Isle of Man	29.577	63.7	12.0	51.7	31.8	8.7	43.5	89
North Shields	29.594	62.0	6.8	55.2	32.1	8.0	40.5	92
Guernsey	1.7	8	7	8	7	6.3	61	14.1
Exeter	—	8	9	7	9	—	46	10.3
Ventnor	—	7	9	6	8	—	43	9.2
Barnstaple	1.5	5	10	8	7	3.8	51	11.0
Royal Observatory	—	6	7	7	9	7.5	38	6.5
Royston	—	7	7	8	8	6.9	63	6.1
Lampeter	0.8	5	9	7	7	7.0	48	12.7
Norwich	1.4	5	7	10	9	7.3	35	7.1
Belvoir Castle	1.9	6	5	11	8	7.2	51	6.0
Liverpool	—	—	—	—	—	7.6	46	6.3
Wakefield	1.6	7	9	5	9	7.5	68	8.7
Leeds	1.7	9	7	7	7	8.5	53	6.6
Stonyhurst	0.6	7	9	5	8	7.4	64	14.0
Scarborough	3.2	5	11	10	6	—	36	8.5
Isle of Man	—	8	7	7	8	6.3	47	9.9
North Shields	1.6	7	6	9	7	6.7	74	10.6

Trade of United Kingdom, 1860-59-8.—Distribution of Exports from, United Kingdom, according to the Declared Real Value of the Exports; and the Computed Real Value (ex-duty) of Imports at Port of Entry, and therefore including Freight and Importer's Profit.

Merchandise (excluding Gold and Silver), Imported from, and Exported to, the following Foreign Countries, &c. (The unit 000's are omitted.)	First Nine Months.					
	1860.		1859.		1858.	
	Imports from	Exports to	Imports from	Exports to	Imports from	Exports to
I.—FOREIGN COUNTRIES:	£	£	£	£	£	£
Northern Europe; viz., Russia, Sweden, Norway, Denmark & Iceland, & Heligoland	13,505	3,964	11,703	4,712	8,861	3,377
Central Europe; viz., Prussia, Germany, the Hanse Towns, Holland, and Belgium	17,977	16,206	14,436	13,537	12,747	14,838
Western Europe; viz., France, Portugal (with Azores, Madeira, &c.), and Spain (with Gibraltar and Canaries)	16,563	7,814	16,534	6,684	12,534	7,148
Southern Europe; viz., Italy, Austrian Empire, Greece, Ionian Islands, and Malta	3,293	4,696	2,983	4,039	2,355	4,910
Levant; viz., Turkey, with Wallachia and Moldavia, Syria and Palestine, and Egypt	10,763	5,927	8,306	5,071	6,105	5,215
Northern Africa; viz., Tripoli, Tunis, Algeria and Morocco	162	154	196	118	188	91
Western Africa	1,143	695	871	512	1,089	505
Eastern Africa; with African Ports on Red Sea, Aden, Arabia, Persia, Bourbon, and Kooria Moorla Islands	40	81	39	263	64	45
Indian Seas, Siam, Java, Sumatra, Philippines; other Islands	869	1,391	1,395	2,310	986	1,787
South Sea Islands	—	18	—	40	—	30
China, including Hong Kong	6,803	4,055	6,556	3,179	5,542	2,014
United States of America	33,782	16,235	25,612	17,426	27,409	10,189
Mexico and Central America	451	464	398	595	258	651
Foreign West Indies and Hayti	2,836	1,753	2,587	1,927	2,926	1,896
South America, (Northern,) New Granada, Venezuela, and Ecuador	504	926	477	797	327	629
" (Pacific,) Peru, Bolivia, Chili, and Patagonia	3,577	2,242	2,624	1,515	5,021	1,673
" (Atlantic) Brazil, Uruguay, and Buenos Ayres	3,134	5,101	3,740	4,082	2,629	3,932
Whale Fisheries; Grnlnd., Davis' Straits, South. Whale Fishery, Falkland Islands	92	4	80	7	153	—
Total.—Foreign Countries	15,514	71,726	98,537	66,814	89,194	58,930
II.—BRITISH POSSESSIONS:						
British India, Ceylon, and Singapore	12,558	14,897	10,805	15,999	10,687	12,787
Austral. Cols.—New South Wales and Victoria	4,086	5,945	3,643	6,329	3,218	5,948
" " So. Aus., W. Aus., Tasm., and N. Zea.	1,645	1,413	1,414	1,320	1,096	1,672
British North America	4,124	3,441	3,502	3,364	2,663	2,971
" W. Indies with Btsh. Guiana & Honduras	5,060	1,748	4,581	1,572	5,325	1,674
Cape and Natal	1,174	1,450	1,065	1,392	1,000	1,275
Brit. W. Co. of Af., Ascension and St. Helena	112	244	149	329	177	207
Mauritius	1,272	365	1,365	431	1,113	460
Channel Islands	515	495	334	467	323	387
Total.—British Possessions	30,546	29,998	26,858	31,223	25,602	27,381
General Total	£ 146,060	101,724	125,395	98,037	114,796	86,311

IMPORTS.—(United Kingdom.)—First Eleven Months (January—November) 1860-59-8-7-6.—Computed Real Value (ex-duty), at Port of Entry (and therefore including Freight and Importer's Profit) of Articles of Foreign and Colonial, Merchandise Imported into United Kingdom.

(First Eleven Months.) (000's omitted.) FOREIGN ARTICLES IMPORTED.		1860.	1859.	1858.	1857.	1856.
		£	£	£	£	£
RAW MATLS.—Textile.	Cotton Wool	31,567,	28,762,	26,346,	26,733,	23,918,
	Wool (Sheep's)..	9,727,	8,791,	7,717,	8,653,	7,625,
	Silk	7,881,	8,904,	5,488,	12,168,	7,097,
	Flax	3,377,	3,463,	2,708,	3,363,	3,223,
	Hemp	1,509,	2,205,	1,520,	1,763,	1,696,
	Indigo	2,403,	1,888,	2,167,	2,030,	2,273,
			56,464,	54,013,	45,946,	54,710,	45,867,
" " Various.	Hides	2,801,	2,795,	2,005,	3,796,	2,271,
	Oils	3,334,	2,846,	2,979,	3,306,	3,337,
	Metals	3,442,	3,221,	3,191,	3,496,	3,207,
	Tallow	2,815,	2,547,	2,240,	2,713,	2,477,
	Timber.....	8,366,	7,002,	4,638,	6,469,	7,029,
		20,758,	18,411,	15,053,	19,960,	18,321,
" " Agricul.	Guano	1,183,	720,	3,634,	2,217,	1,932,
	Seeds	2,697,	2,570,	2,005,	2,494,	2,554,
		3,880,	3,290,	5,639,	4,711,	4,486,
TROPICAL, & C., PRODUCE.	Tea	5,932,	4,510,	4,599,	4,300,	4,431,
	Coffee	2,175,	1,788,	1,505,	1,553,	1,370,
	Sugar & Molasses	11,722,	11,322,	11,868,	14,790,	10,568,
	Tobacco	984,	1,068,	1,522,	1,651,	1,403,
	Rice.....	778,	658,	1,475,	1,619,	1,625,
	Fruits	954,	950,	569,	1,030,	937,
	Wine	3,883,	2,320,	1,803,	3,584,	3,148,
	Spirits	1,769,	1,993,	1,059,	2,597,	1,827,
			28,197,	24,609,	24,400,	31,124,	25,309,
FOOD	Grain and Meal..	27,320,	16,558,	18,714,	17,228,	20,525,
	Provisions	5,036,	2,986,	2,880,	3,770,	4,291,
		32,356,	19,544,	21,594,	20,998,	24,816,
Remainder of Enumerated Articles		3,232,	2,966,	2,586,	3,547,	2,931,
TOTAL ENUMERATED IMPORTS.....		144,887,	122,833,	115,218,	135,050,	121,730,
Add for UNENUMERATED IMPORTS (say)		36,222,	30,708,	28,804,	33,762,	30,432,
TOTAL IMPORTS		181,109,	153,541,	144,022,	168,812,	152,162,

EXPORTS.—(United Kingdom.)—Whole Years, 1860-59-8-7-6.—Declared Real Value at Port of Shipment of Articles of BRITISH and IRISH Produce and Manufactures Exported from United Kingdom.

BRITISH PRODUCE, & C., EXPORTED. (Year.) Unit 000's omitted.		1860.	1859.	1858.	1857.	1856.	
		£	£	£	£	£	
MANFRS.—Textile.	Cotton Manufactures..	42,138,	38,743,	33,402,	30,373,	30,204,	
	" Yarn.....	9,875,	9,466,	9,753,	8,701,	8,029,	
	Woolen Manufactures	12,164,	12,033,	9,778,	10,703,	9,500,	
	" Yarn.....	3,844,	3,080,	2,954,	2,942,	2,890,	
	Silk Manufactures ...	2,106,	2,145,	1,868,	2,573,	2,666,	
	" Yarn.....	295,	207,	229,	317,	296,	
	Linen Manufactures...	4,802,	4,607,	4,124,	4,517,	4,888,	
	" Yarn.....	1,801,	1,685,	1,739,	1,648,	1,366,	
			77,025,	71,966,	63,667,	61,774,	59,839,
	" Sewed.	Apparel	2,157,	2,191,	1,944,	2,159,	1,816,
Haberdy. and Millnry.		4,011,	4,289,	3,474,	3,894,	3,638,	
		6,168,	6,480,	5,418,	6,053,	5,454,	
METALS	Hardware.....	3,772,	3,826,	3,280,	4,016,	3,748,	
	Machinery	3,825,	3,701,	3,604,	3,884,	2,716,	
	Iron	12,158,	12,327,	11,236,	13,406,	12,966,	
	Copper and Brass.....	3,002,	2,600,	2,854,	3,124,	2,648,	
	Lead and Tin	2,562,	2,552,	2,238,	2,516,	2,381,	
	Coals and Culm	3,322,	3,266,	3,053,	3,211,	2,827,	
		28,641,	28,272,	26,265,	30,157,	27,286,	
Ceramic Manufcts.	Earthenware and Glass	2,094,	1,921,	1,721,	2,151,	1,916,	
Indigenous Mnfrs.	Beer and Ale	1,864,	2,116,	1,852,	1,592,	1,455,	
	Butter	633,	717,	541,	562,	694,	
	Cheese	119,	138,	91,	114,	160,	
	Candles	239,	188,	157,	280,	305,	
	Salt	358,	254,	288,	337,	401,	
	Spirits	287,	306,	207,	752,	998,	
	Soda	963,	1,024,	813,	761,	608,	
			4,463,	4,743,	3,949,	4,398,	4,621,
Various Manufcts.	Books, Printed.....	495,	478,	390,	422,	425,	
	Furniture	222,	242,	258,	289,	208,	
	Leather Manufactures	2,129,	1,998,	2,011,	2,289,	1,756,	
	Soap.....	250,	226,	210,	240,	276,	
	Plate and Watches ...	564,	495,	454,	545,	481,	
Stationery.....	750,	840,	804,	742,	720,		
		4,410,	4,279,	4,127,	4,527,	3,866,	
Remainder of Enumerated Articles		3,966,	3,366,	3,524,	3,806,	4,465,	
Unenumerated Articles		9,076,	9,413,	7,943,	9,200,	8,377,	
TOTAL EXPORTS		135,843,	130,440,	116,614,	122,066,	115,824,	

SHIPPING.—FOREIGN TRADE.—(United Kingdom.)—Years, 1860-59-8-7.—
Vessels Entered and Cleared with Cargoes, including repeated Voyages, but
excluding Government Transports.

(Year.)	1860.			1859.		1858.		1857.	
	Vessels.	Tonnage (000's omitted.)	Average Tonnage	Vessels.	Tonnage (000's omitted.)	Vessels.	Tonnage (000's omitted.)	Vessels.	Tonnage (000's omitted.)
ENTERED:—									
<i>Vessels belonging to—</i>	No.	Tons.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Russia	435	126,	290	346	103,	233	70,	169	43,
Sweden	1,119	182,	162	912	151,	720	120,	549	98,
Norway	2,862	638,	220	2,564	578,	2,187	483,	2,080	450,
Denmark	2,957	292,	100	2,771	277,	2,400	238,	2,511	214,
Prussia and Ger. Sts.	4,067	863,	210	3,603	799,	3,173	715,	3,428	664,
Holland and Belgium	1,758	239,	136	1,622	225,	1,398	211,	1,485	243,
France	2,187	186,	85	2,334	192,	2,716	234,	1,122	90,
Spain and Portugal.....	391	101,	253	399	94,	379	79,	399	86,
Italy & other Eupn. Sts.	1,057	299,	280	699	197,	837	640,	577	169,
United States	1,417	1,361,	960	1,115	1,078,	1,276	1,187	1,250	1,214,
All other States	20	6,	300	24	7,	17	6,	32	13,
	18,270	4,293,	235	16,389	3,701,	15,335	3,583,	13,602	3,314,
United Kingdm. & } Depds.....	20,104	5,762,	286	19,909	5,389,	19,256	5,233,	19,091	5,418,
Totals Entered	38,374	10,055,	260	36,298	9,090,	34,591	8,816,	32,693	8,732,
CLEARED:—									
Russia	396	117,	295	366	109,	242	72,	178	41,
Sweden	1,163	185,	159	946	158,	798	139,	714	135,
Norway	1,746	311,	179	1,782	343,	1,379	262,	1,696	330,
Denmark	3,362	328,	97	3,161	313,	2,999	302,	3,141	317,
Prussia and Ger. Sts.	5,033	936,	186	5,117	971,	4,832	872,	4,776	827,
Holland and Belgium	2,018	319,	158	2,024	305,	2,070	337,	2,134	388,
France	4,068	431,	106	3,612	394,	4,294	456,	4,410	474,
Spain and Portugal	364	92,	253	377	93,	399	89,	424	56,
Italy & other Eupn. Sts.	1,152	332,	290	837	233,	1,040	297,	739	222,
United States	1,456	1,368,	939	1,158	1,091,	1,308	1,229,	1,334	1,296,
All other States	19	6,	316	26	8,	18	6,	21	8,
	20,777	4,425,	213	19,406	4,018,	19,379	4,061,	19,567	4,137,
United Kingdm. & } Depds.....	23,713	6,359,	270	23,701	6,224,	23,455	5,875,	24,834	6,204,
Totals Cleared	44,490	10,784,	242	43,107	10,242,	42,834	9,936,	44,401	10,341,

GOLD AND SILVER BULLION AND SPECIE.—IMPORTED AND
EXPORTED.—(United Kingdom.)—Computed Real Value for the
Whole Years, 1860-59-8.

(000's at unit end omitted.)

(Whole Year)	1860.		1859.		1858.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
Imported from:—	£	£	£	£	£	£
Australia	6,719,	1,	8,625,	3,	9,065,	1,
So. Amca. and W. } Indies	1,180,	525,	1,739,	3,385,	3,848,	2,987,
United States and } Cal.	3,918,	875,	7,909,	1,794,	4,502,	309,
	11,817,	5,401,	18,273,	5,152,	17,415,	3,297,
France	341,	3,698,	936,	6,366,	654,	2,979,
Hanse Towns, Holl. } & Belg.	60,	966,	379,	2,972,	1,623,	743,
Portl., Spain, and } Gbrltr.....	14,	272,	90,	272,	172,	433,
Mlta., Trky., and } Egypt	36,	19,	318,	15,	1,282,	14,
China	—	—	—	3,	35,	86,
West Coast of Africa	91,	10,	97,	4,	111,	3,
All other Countries....	226,	27,	2,205,	33,	1,501,	45,
Totals Imported	12,535,	10,393,	22,298,	14,772,	22,793,	6,700,
Exported to:—						
France	10,401,	915,	14,902,	482,	10,530,	391,
Hanse Towns, Holl. } & Belg.	151,	593,	929,	955,	315,	1,254,
Portl., Spain, and } Gbrltr.....	1,357,	1,	739,	—	187,	—
	11,909,	1,509,	16,570,	1,437,	11,032,	1,645,
Ind. and China (via } Egypt)	1,302,	8,124,	613,	16,004,	131,	5,089,
Danish West Indies....	21,	29,	137,	6,	132,	73,
United States	1,724,	3,	10,	4,	135,	67,
South Africa	51,	—	5,	5,	64,	3,
Mauritius.....	—	—	—	1,	107,	26,
Brazil	357,	167,	98,	99,	289,	126,
All other Countries....	278,	61,	648,	51,	675,	34,
Totals Exported	15,642,	9,893,	18,081,	17,607,	12,565,	7,063,
Excess of Imports	—	500,	4,217,	—	10,228,	—
„ Exports	3,057,	—	—	2,835,	—	363,

REVENUE.—(UNITED KINGDOM.)—31ST DEC., 1860-59-8-7.

Net Produce in YEARS and QUARTERS ended 31ST DEC., 1860-59-8-7.

[Unit 000's omitted.]

QUARTERS, ended 31st Dec.	1860.	1859.	1860.		Corresponding Quarters.	
			Less.	More.	1858.	1857.
	£ Mlns.	£ Mlns.	£ Mlns.	£ Mlns.	£ Mlns.	£ Mlns.
Customs	5,861,	6,225,	364,	—	6,209,	5,590,
Excise	4,359,	5,360,	1,001,	—	5,004,	4,769,
Stamps	2,036,	2,018,	—	18,	2,029,	1,761,
Taxes	1,293,	1,424,	131,	—	1,383,	1,361,
Post Office	880,	830,	—	50,	860,	810,
	14,429,	15,857,	1,496,	68,	15,485,	14,291,
Property Tax	3,530,	938,	—	2,592,	547,	808,
	17,959,	16,795,	1,496,	2,660,	16,032,	15,099,
Crown Lands	83,	83,	—	—	83,	82,
Miscellaneous	228,	235,	6,	—	918,	726,
Totals	18,270,	17,113,	1,502,	2,660,	17,033,	15,907,
			NET INCR. £1,157,518			
YEARS, ended 31st Dec.	1860.	1859.	1860.		Corresponding Years.	
	£ Mlns.	£ Mlns.	Less. £ Mlns.	More. £ Mlns.	1858. £ Mlns.	1857. £ Mlns.
Customs	23,032,	24,825,	1,792,	—	24,092,	22,464,
Excise	19,069,	19,011,	—	28,	17,966,	17,472,
Stamps	8,285,	7,977,	—	308,	7,996,	7,269,
Taxes	3,126,	3,231,	105,	—	3,158,	3,104,
Post Office	3,420,	3,225,	—	195,	3,075,	2,992,
	56,932,	58,299,	1,897,	531,	56,287,	53,301,
Property Tax	12,902,	6,077,	—	6,825,	7,591,	15,138,
	69,834,	64,376,	1,897,	7,356,	63,878,	68,439,
Crown Lands	290,	282,	—	7,	278,	274,
Miscellaneous	1,843,	1,413,	—	431,	2,131,	1,677,
Totals	71,967,	66,071,	1,897,	7,794,	66,287,	70,390,
			NET INCR. £5,897,026			

REVENUE (UNITED KINGDOM).—QUARTER ENDED 31ST DEC., 1860:—
APPLICATION.

An Account showing the REVENUE and other RECEIPTS of the QUARTER ended 31st Dec., 1860; the APPLICATION of the same, and the Charge of the Consolidated Fund for the said Quarter, together with the Surplus or Deficiency upon such Charge.

Received:—

Surplus Balance beyond the Charge of the Consolidated Fund for the Quarter ended 30th September, 1860, viz.:—	£
Great Britain	—
Ireland	£205,900
	205,900
Income received in the Quarter ended 31st December, 1860, as shown on preceding page	18,270,348
Amount raised by issue of Exchequer Bonds (in part of a grant of £2,000,000)	1,000,000
Amount received in the Quarter ended 31st December, 1860, in repayment of Advances for Public Works, &c.	351,716
	£19,827,964
Balance, being the deficiency on 31st December, 1860, upon the charge of the Consolidated Fund in Great Britain, to meet the Dividends, and other charges, payable in the Quarter to 31st March, 1861, and for which Exchequer-bills (Deficiency) will be issued in that Quarter	2,709,516
	£22,537,480

Paid:—

Net Amount applied out of the Income for the Quarter ended 31st December, 1860, in redemption of Exchequer-bills (Deficiency), for the Quarter ended 30th September, 1860, viz.:—	£
Total Deficiency	£3,072,016
Deduct, Redeemed by Sinking Fund	228,000
	2,844,016
Amount applied out of the Income to Supply Services in the Quarter ended 31st December, 1860	11,409,530
Charge of the Consolidated Fund for the Quarter ended 31st December, 1860, viz.:—	
Interest of the Permanent Debt	£6,835,055
Terminable Debt	355,318
Interest on Exchequer Bills (deficiency)	1,338
The Civil List	101,346
Other Charges on Consolidated Fund	418,753
Advances for Public Works, &c.	149,613
	7,861,423
Surplus Balance in Ireland beyond the Charge of the Consolidated Fund in Ireland for the Quarter ended 31st December, 1860, viz.:	922,511
	£22,537,480

BANK OF ENGLAND.—WEEKLY RETURN.

Pursuant to the Act 7th and 8th Victoria, c. 32 (1844), for Wednesday in each Week, during the FOURTH QUARTER (Oct.—Dec.) of 1860.

ISSUE DEPARTMENT.					COLLATERAL COLUMNS.	
1	2	3	4	5	6	7
Liabilities.	DATES.	Assets.			Notes in Hands of Public.	Minimum Rates of Discount at Bank of England.
Notes Issued.	(Wednesdays.)	Government Debt.	Other Securities.	Gold Coin and Bullion.	(Col. 1 minus col. 16.)	
Mlns. £	1860.	Mlns. £	Mlns. £	Mlns. £	Mlns. £	1860. Per ann.
29,64	Oct. 3	11,02	3,46	15,17	21,95	24 May, 4 p.c.
29,16	" 10	11,02	3,46	14,69	21,35	
28,29	" 17	11,02	3,46	13,81	21,79	
28,17	" 24	11,02	3,46	13,69	21,45	8 Nov. 4½ "
27,86	" 31	11,02	3,46	13,88	21,50	13 " 5 "
27,64	Nov. 7	11,02	3,46	13,16	21,21	
27,00	" 14	11,02	3,46	12,52	20,66	15 " 6 "
27,01	" 21	11,02	3,46	12,54	20,40	
27,54	" 28	11,02	3,46	13,06	19,90	29 " 5 "
27,41	Dec. 5	11,02	3,46	12,93	20,21	31 Dec. 6 "
27,12	" 12	11,02	3,46	12,64	19,92	
27,04	" 19	11,02	3,46	12,57	19,69	1861.
26,57	" 26	11,02	3,46	12,19	19,65	7 Jan. 7 "

BANKING DEPARTMENT.

Liabilities.					Assets.					Totals of Liabilities and Assets.
Capital and Rest.		Deposits.			DATES. (Wdmsdys.)	Securities.		Reserve.		
Capital.	Rest.	Public.	Private.	Seven Day and other Bills.		Government.	Other.	Notes.	Gold and Silver Coin.	Mlns. £
Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	1860.	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £
14,55	3,80	6,84	12,01	,80	Oct. 3	9,66	19,94	7,69	,70	38,00
14,55	3,08	6,58	12,81	,76	" 10	9,66	19,58	7,81	,74	37,79
14,55	3,12	3,25	14,34	,79	" 17	9,49	19,29	6,50	,77	36,06
14,55	3,13	3,41	14,79	,79	" 24	9,49	19,72	6,72	,74	36,68
14,55	3,14	4,16	13,74	,76	" 31	9,49	19,76	6,36	,74	36,35
14,55	3,17	4,97	13,11	,82	Nov. 7	9,49	19,97	6,43	,74	36,62
14,55	3,19	5,80	12,60	,78	" 14	9,49	20,31	6,34	,80	36,93
14,55	3,21	6,07	12,66	,73	" 21	9,49	20,30	6,61	,82	37,22
14,55	3,17	6,52	13,37	,72	" 28	9,49	20,39	7,64	,80	38,32
14,55	3,17	6,62	12,47	,72	Dec. 5	9,49	20,10	7,20	,74	37,53
14,55	3,18	7,03	12,10	,66	" 12	9,54	19,99	7,20	,80	37,53
14,55	3,18	7,38	11,76	,65	" 19	9,54	19,89	7,35	,76	37,53
14,55	3,19	7,36	11,97	,61	" 26	9,54	20,52	6,92	,70	37,69

CIRCULATION.—COUNTRY BANKS.

Average amount of Promissory Notes in Circulation in ENGLAND and WALES, on Saturday, in each Week during the FOURTH QUARTER (Oct.—Dec.) of 1860; and in SCOTLAND and IRELAND, at the Three Dates, as under.

ENGLAND AND WALES.			SCOTLAND.			IRELAND.				
DATES.	Private Banks. (Fixed Issues, 4-10)	Joint Stock Banks. (Fixed Issues, 3-30.)	TOTAL. (Fixed Issues, 7-70.)	Four Weeks, ended	£5 and upwards.	Under £5.	TOTAL. (Fixed Issues, 2-75.)	£5 and upwards	Under £5.	TOTAL. (Fixed Issues, 6-35.)
	Mlns. £	Mlns. £	Mlns. £	1860.	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £	Mlns. £
1860. Oct. 6	3,53	3,09	6,62							
" 13	3,60	3,10	6,70							
" 20	3,59	3,08	6,67	Oct. 20	1,60	2,68	4,28	3,45	3,45	6,70
" 27	3,56	3,05	6,61							
Nov. 3	3,53	3,04	6,57							
" 10	3,48	3,06	6,54							
" 17	3,44	3,04	6,48	Nov. 17	1,71	2,87	4,58	3,59	3,56	7,15
" 24	3,41	3,02	6,43							
Dec. 1	3,56	2,99	6,35							
" 8	3,31	2,95	6,26							
" 15	3,28	2,93	6,21	Dec. 15	1,73	2,96	4,69	3,43	3,61	7,04
" 22	3,26	2,92	6,18							
" 29	3,27	2,90	6,17							

FOREIGN EXCHANGES.—Quotations as under, London on Paris, Hamburg & Calcutta; —and New York, Calcutta, Hong Kong & Sydney, on LONDON—with collateral cols.

DATES.	Paris.			Hamburg.			Calcutta.			New York.	India House.	At Calcutta on London.	Hong Kong.	Sydney.	Standard Silver in bars in London.
	London on Paris.	Bullion as arbitrated.		London on Hambg.	Bullion as arbitrated.		60 d. s.	60 d. s.	6 m. s.						
	3 m. d.	Agnst. Engd.	For Engd.	3 m. d.	Agnst. Engd.	For Engd.	60 d. s.	60 d. s.	6 m. s.						
1860. Oct. 6	25.40	pr. ct.	pr. ct.	13.6½	pr. ct.	pr. ct.	109½	d.	d.	d.	pr. ct.	d.			
" 20	.42	0.4	—	4 p.	.6	0.3	—	"	"	"	"	"	"	61½	
Nov. 3	.40	0.3	—	2 "	.6½	0.4	—	109	"	"	"	"	"	61½	
" 17	.60	—	0.1	"	.7½	—	—	108½	"	"	"	"	"	"	
Dec. 8	.50	0.1	—	1 "	.7	0.1	—	104	"	"	"	"	"	61½	
" 22	.52	—	—	1½ "	.6½	—	—	102	"	25	"	"	"	"	

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OF THE
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OF
THE STATISTICAL SOCIETY.
1838—1860.

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By a resolution of the Council, dated 12th May, 1854, the price of back numbers of the Journal of the Society, charged to Fellows, was raised from one-half to three-fifths of the publishing price, and the General Index to the First Fifteen Volumes was to be sold to them at Five Shillings. Any single number may be had, by *Fellows only*, at the Society's Rooms, 12, St. James's Square, S.W.

QUARTERLY JOURNAL
OF THE
STATISTICAL SOCIETY.

JUNE, 1861.

REPORT of the COUNCIL for the FINANCIAL YEAR ended 31st December, 1860, and for the SESSIONAL YEAR ended March, 1861, presented at the TWENTY-SEVENTH Anniversary Meeting of the STATISTICAL SOCIETY, held in the Society's Rooms, 12, St. James's Square, on Friday, 15th MARCH, 1861;—with the PROCEEDINGS of that Meeting.

SIR JOHN P. BOILEAU, BART., F.R.S., *Vice-President, in the Chair.*

REPORT.

"At the present time (March, 1861), the number of Fellows is 373—including 70 Life Members:—against 357 (including 70 Life Members)—at the same date 1860. During the twelve months now ended, the losses by resignations, deaths, and non-payments, have been 16, and the New Elections have been 32.

"The Income for the Year ended 31st December, 1860 (omitting the Banker's Balance from 1859), has been 706*l.*, and the Expenditure 787*l.* The Cash Balance to be carried to the current year, 1861, is 216*l.* The necessary expenses connected with the Meeting of the International Statistical Congress, in July last, has led to an extraordinary outlay, which will account for the preceding statement.

"The attendance at the Monthly Meetings has been larger than in former years; and the Meetings themselves have fully maintained the reputation they have so long enjoyed. The discussions which follow the papers read, increase in interest and importance.