

## **Transactions of the Statistical Society of London.**

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Statistical Society (Great Britain)  
Royal College of Surgeons of England

### **Publication/Creation**

London : Charles Knight, 1837.

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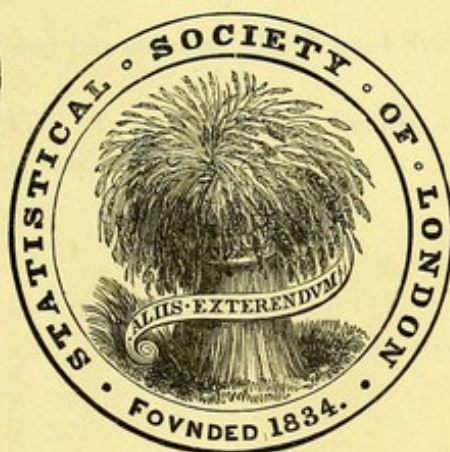
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TRANSACTIONS  
OF THE  
STATISTICAL SOCIETY OF LONDON.

VOLUME I.—PART I.



LONDON:  
CHARLES KNIGHT AND CO., LUDGATE STREET.



TRANSACTIONS

STATISTICAL SOCIETY OF LONDON

LONDON:  
PRINTED BY W. CLOWES AND SONS,  
14, Charing Cross.



LONDON:  
CHARLES KNIGHT AND CO. LUDGATE STREET

1887

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TRANSACTIONS  
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OBSERVATIONS AND SUGGESTIONS RESPECTING THE COLLECTION, CONCENTRATION, AND DIFFUSION OF STATISTICAL KNOWLEDGE REGARDING  
THE STATE OF THE UNITED KINGDOM.

By WILLIAM JACOB, Esq., F.R.S., M.R.S.L.,  
AND CORRESPONDING MEMBER OF THE FRENCH INSTITUTE.

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FEW persons are to be found in the present day who will hesitate in allowing that the best mode of allaying disquietude and of diffusing contentment on the subject of public affairs is an open and clear disclosure of their condition and management. In a country where discussions on every subject connected with the well being of the state are freely indulged and extensively exercised, it becomes a most imperative duty on those who take the lead to communicate truths and refute falsehoods, in the most clear, accurate, and concentrated forms. The diffusion of real knowledge—of facts faithfully collated—of statements accurately digested—of inferences fairly deduced—must be beneficial in a country like Great Britain in a more eminent degree than in any other ; because it is the interest of those who administer the government to perform no acts that will not bear examination, and it has become a right of the public to receive every kind of information which can lead to a correct judgment of their capacity, assiduity, and integrity.

Except on such subjects as have incidentally been connected with financial matters, but little statistical information has been collected, and that chiefly by the industry of the committees of the two Houses of Parliament ; but that little has been so mingled with a vast mass of irrelevant, or unimportant, or tiresome details, and is scattered through such a number of ponderous folio volumes, that it has presented an appalling labour to all but the most indefatigable inquirers. It is true that, of late years, accurate indexes have been framed to the parliamentary papers, which have given better facilities for reference than were before afforded ; but at the same time the number of the annual volumes have continued to increase, so that, even with those helps, they present an array that requires courage to encounter.

A more general diffusion of accurate knowledge regarding the public affairs would tend to check that excitement and party spirit which has been often created by misrepresentation or exaggeration, and has produced annoyance to the government, and at least a temporary dissatisfaction in the public mind.



A great step to accurate knowledge, and, as a first step, a most important one, has been taken by the institution of the decennial census, and by the confirmation by each subsequent census of the accuracy of those which preceded it. Before that plan was put in practice, continual controversies were carried on between parties, some of whom contended that our numbers were rapidly declining, and others as eagerly maintaining that our population was continually increasing. With this question was mingled party feeling and party heat; and the opponents were led to make use of the most violent aspersions and insinuations regarding each other. That controversy, which created no small interest at the time it was carried on, has now yielded to the clear and simple ascertainment of the facts; and the angry feelings, generated by opposing one class of probabilities to another, have been buried, it may be hoped, in everlasting oblivion.

A general diffusion of the knowledge of many other facts, equally susceptible of accurate ascertainment, may produce a similar happy effect; and in the discussion of those opinions which are merely inferential, it may beget a temperance and moderation which must be highly advantageous.

The preceding observations may be deemed too trite and general to contain any strong grounds for much interference with the present system by which the public are made acquainted with the management of national affairs; and the difficulties in the way of any great change may present themselves as obstacles in the way of its introduction. It is not intended, however, to recommend the introduction of any change beyond such as may tend to accumulate, classify, and simplify ascertained facts—to make them easy of acquisition and comprehension—and to combine with it a degree of economy, which, as far as it shall extend, may diminish expenditure.

It may then be proper to proceed to the development of the practical modes by which the business before suggested may be best conducted. It is presumed that a separate department for this purpose might be formed under the Board of Trade, as the best calculated for this particular object, by its general knowledge and previous experience, and as has been strongly recommended by some prominent members of the legislative body. In such a department the various papers printed by order of the two Houses of Parliament might be examined, classified, or abbreviated, as may be most appropriate, and that from some past period, hereafter to be suggested, down to the present time.\*

Valuable statistical information is obtainable from the public departments, and the order in which they are entitled to notice is indicated by the greater degree of certainty which attends the results to which they arrive.

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#### STAMP OFFICE.

From this department the returns will show the increase of the wealth of the empire, as far as concerns personal property, with a degree of accuracy that can scarcely be found in any

\* Since this paper was written, an establishment at the Board of Trade has been formed in some measure corresponding with the suggestions here presented; and, being under able guidance, the volumes it has produced are of incalculable value. It is only to be regretted that the department is too limited in its extent.



other way. This is especially ascertainable by the probate duty, by which the amount of property annually left by those who die is discovered; and it may be made of use as the foundation of an estimate of the whole personal wealth of the subjects of the United Kingdom. Thus, the amount of the tax being known, and the rate of the impost on the different grades of property, it will be easy to multiply that amount by the proportion between the number of the whole population and the number of the deceased. This is determined, by the last census, to be one in fifty-four; and if the amount of the probate tax be taken at £900,000, and the average rate be estimated at  $2\frac{1}{2}$  per cent., the value of the personal property bequeathed must amount to £45,000,000, and the whole mass of that description of wealth to somewhat more than £2,000,000,000. This calculation does not lay claim to accuracy, but is here introduced merely to show, when exact data shall be supplied, in what manner the tax may be made use of to estimate the one great description of property on which it is imposed. By the help of this tax, combined with calculations of the value of real property, to be ascertained by other means, some light may be thrown on the important subject of the proportion between the wealth of the empire and that debt which the community owes, in the forms of stock, to the individual members who make a large portion of it.

There is another consideration of some importance attached to the probate duty. It is imposed at the same rate in England, in Ireland, and in Scotland; and, by the process before described, the relative wealth of each of the kingdoms, of a personal description, may be accurately obtained, and the aggregate wealth be approximatively seen.

This particular tax, especially when connected with other stamp taxes which will be subsequently noticed, will serve to show not only the amount of the increase of personal property, but in some measure the distribution of it. This is of importance at a period like the present, when many who allow that general wealth has vastly increased, yet contend, that by being collected in large masses, and not equably dispensed among the various classes of the community, it is of less general advantage than it would be by a different distribution; and some have maintained that, by such aggregation in large masses, its increase becomes injurious to the larger number who have only their labour to subsist upon.

It does not appear necessary here to assent to, or dissent from, such an opinion, but it is desirable to know if the lower, or middle, or higher classes, have most increased; or if, in the aggregate augmentation, each has remained in the same relative position.

For the purpose under consideration, it will become necessary that the accounts rendered by the Stamp Office of the yearly amount of the probate duty should contain more minute details than have been hitherto furnished. They should show not merely the gross amount of the property sworn to, but the amount of each class from £20 to £50, from £50 to £100, from £100 to £200, and on up to the highest; and also the amount in each class of the testate and intestate.

The legacy tax, like that on probates, will serve to show the increase of the wealth of the community, but will be no guide to the manner of its distribution. Neither the probate nor the legacy tax will afford the exact degree of increase which personal property has received.

A practice has arisen since the imposition of those taxes, and has been gradually extending, of making settlements by which the payment of a considerable proportion of them has been

Legacy Tax.



avoided. The possessor of property, whether in the funds or in other securities, may, by a deed, invest it in trustees during his life, and then for the benefit of those to whom, if no tax existed, he would have bequeathed it by his will. There seems to be no means of estimating the extent to which such practices are adopted, though the revenue may suffer but in a slight degree, as there must be a stamp on the trust deed; yet those deeds are in their nature so varied and so indefinite, that it becomes difficult to ascertain what portion of the property held under them ought to be considered as that of persons dying.

Bills of  
Exchange.

The returns, of the stamps on bills of exchange will, in some measure, show the progress of commercial operations, both foreign and domestic; and some knowledge will be made attainable by them as to the class of traders among whom an increase or decrease of transactions may have taken place. By classes is not meant traders in specific articles, but wholesale or retail dealers, larger or smaller manufacturers, or importers and exporters upon a large or a small scale. If returns of the number of stamps between 1*s.* and 1*s.* 6*d.*, between 1*s.* 6*d.* and 2*s.*, and so up to the highest, be made, a judgment may be formed as to the proportions in which the wealth acquired by trade is distributed among the several ranks into which society is divided in this country; such returns should also comprehend the compositions made by the Bank of England and by private bankers for stamps.

Receipt  
Stamps.

The tax on receipts will be useful to show the increase of commercial operations in the same manner as that on bills of exchange; but it is in so many instances evaded by making payments for large sums through bankers, and for the smaller ones by accounts current balanced, that little knowledge can be derived from returns of them beyond their annual amount for financial purposes. Such returns are, and should continue to be made, as some proof of growing wealth, or at least as some corroboration of other proofs.

Policy  
Stamps.

The stamp tax on policies of insurance against mortality, as well as against loss by fire, or on vessels and their cargoes by sea, is productive to the revenue, but is scarcely capable of being made subservient to any statistical purpose except that of confirming what may be shown by other means—the increase or decrease of national prosperity. Though an increase in these duties may be evidence of the greater degree of prudence and foresight of individuals more than of their wealth, yet that prudence is itself presumptive evidence of growing wealth, as well as one of the causes of it.

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#### ASSESSED TAXES.

Property Tax.

It is difficult to direct any attention to the assessed taxes, without having reference to one of them which has now been abolished several years; viz., the property tax. In the latter periods of its payment it had acquired a degree of accuracy which may make it of great use in any investigation into the increase of general wealth, and that may be therefore referred to with no expressions or feelings of regret that the occasion for its reinstatement has not been found necessary. Though, by the process before touched upon, and by others in corroboration of it, some estimate may be made of the value of personal property, yet the case is different with that which is the largest and the most important, the landed wealth of the kingdom.

Strong opinions have been expressed that the value of the whole land of the kingdom is



considerably less now than it was at the conclusion of the peace in the year 1815. Before implicit assent be given to this opinion, a variety of considerations ought to be called into the comparison. It seems clear, by the inclosure bills that have passed, that much neglected land has been brought into cultivation—that most lands have received improved cultivation—that farm-houses and farm-buildings have been repaired—and that most farms have been rendered more accessible to markets by the general improvement of the roads. The same land provides sufficient food at present for more than 3,000,000 persons beyond what it did at the period of the general peace. This last circumstance shows that the real efficiency of the land in yielding its increase has not been lessened; if it had been lessened, we must have been in want of far more of the produce of the soil than has been extracted from foreign countries, and more probably than could have been obtained without a most extravagant rise in its money price. It may, however, be safe to contend, that if the absolute money price of rent, and of the production of the land, have fallen, its effective price, as given in exchange for other commodities, has been constantly maintained. The same measure of corn, or weight of meat or butter, will produce as many yards of cloth, as many pairs of shoes, as many tons of coals, or as many bottles of wine, as it would have done when prices were at the highest.

We can have no statistical returns of the produce of the land; and the property tax gave only the money value of it in the form of rent in the currency of the day. That amount, though it is an imperfect guide, is better than none; and therefore it would be desirable to obtain from the Tax-office all, even the most minute particulars, relating to the assessments when the property tax was in operation.

That Board can, however, furnish much that is statistical. The most important is what relates to the house tax. It is necessary to have the number of houses in each year classed, both by the number of windows and by the rent. In the first, should, if possible, be shown the whole number of houses having less than 8 windows, and the number of those of 9, 10, 11, and so on up to 180, the greatest of all stated. The other account should exhibit the number of houses rated at less than £10, of those between £10 and £19, between £20 and £30, and so on to the highest point. Such accounts would tend to show what increase on that description of property is made, and also assist a judgment to be formed of the distribution of gains generally. If the lower description of houses gets on constantly faster than the class above them, it may lead to the conclusion that there is a tendency to increase poverty in spite of the vast wealth which a few may have acquired. Such a conclusion, if it should be fairly arrived at, must be boldly encountered, the cause examined, and due remedies applied.

It will be proper to obtain from the same branch of the public service, the particulars of the horse tax, the men-servants tax, and the tax on carriages, to which may be added that on dogs. The number of persons paying for one, two, and three of these, and so on to the greatest number respectively of each of those subjects of taxation, may be annually furnished with great facility.

The two Boards which have been noticed are instituted for the sole purpose of taxation; they neither furnish to the subject any accommodation nor any protection, as do those in succession to be adverted to. They have not, like the others, any reference to quantities of articles, but solely to the receipt of money. Although the net income obtained by these Boards is regularly stated in the finance accounts presented to Parliament, yet particulars

House Tax

Tax on Men-Servants, on Horses, on Carriages, and on Dogs.



should also be exhibited of the gross income, and of the several items constituting the difference between the gross and the net income.

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#### POST OFFICE.

This department, though highly productive as a financial establishment, has the additional merit of affording to the public an accommodation of an extensive and useful kind, that could scarcely be furnished by any other means. Since the conveyance of letters and that of passengers have been united together, now nearly fifty years, the greatest expedition has been added to security; and, besides the annual income derived from the management, the public are supplied with newspapers and parliamentary papers without charge for postage, and the government carries on its correspondence with all parts of the kingdom without expense; and, it may be asserted, the charge for conveyance to private individuals, whilst it is both secure and expeditious, is less expensive than in most of the other parts of Europe. It is, however, a department both of great expenditure and great receipt, and consequently one in which the difference between the gross income and the net income exceeds the other finance offices of government.

It is desirable that the several items of which this difference is composed should be registered, classified, and made easily accessible. It is also proper that the expense of conveyance per mile of letters, whether by coaches, by one-horse vehicles, or, in the few instances where it occurs, on horseback, should be made a subject of returns. Besides this, there should be notifications made of the extent of the business transacted, to be shown by the number of letters received and forwarded respectively at the General Post Office in London. These might be distinguished under the heads of "Inland letters," of "Colonial letters," of "India letters," of "Foreign letters from Europe," and of "Letters from all other parts of the world." To these may appropriately be added the number of letters conveyed by means of the twopenny post in and round the metropolis.

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#### EXCISE OFFICE.

There is, perhaps, no branch of the executive government in this or any other country better arranged and conducted, nor any in which economy is more sedulously exercised, than in the Excise. It is peculiarly of importance to the object of this paper, because it almost wholly refers to quantities of articles, and only in few instances to mere money. In a statistical view, quantity is of more importance than price, because, generally, it affords clear means of estimating the value that industry creates.

**Auction Duty.** The only duty that refers merely to money collected under the Excise, is that on auctions. Though the amount received may, in a financial view, deserve attention, yet it affords no indications which can easily and directly be made available to ascertain the advancement or the decline of general prosperity. The commodities conveyed from one possessor to another are so numerous as to defy any classification; and if any could be made, it does not appear capable of being much applied to the purpose under consideration.



One of the most important branches of manufacture carried on under the inspection of the Excise Board, is the distillery. It would be desirable under that, to have returns of the quantity of malt made use of, and, if it can be obtained, of corn in an unmalted state. The number of gallons, distinguishing the distilled from the rectified, should be furnished, and also the quantities which are sent from Scotland and Ireland, where the duty is at a lower rate than in England. The Excise accounts will give the whole production of this article; and when that which is exported, and which should likewise be communicated, is deducted, the consumption also will be accurately seen.

Distilleries.

The duty on malt is collected with great simplicity, and the number of bushels which are annually made may be furnished. Since the tax on beer has ceased, it would be shown by the account of the distilleries what portion of it is applied to that manufacture, and the remainder may be presumed to be used in the public and private breweries. The quantity of malt exported must be very small, but when that is deducted from the portion which pays the duty, the annual consumption will appear.

Malt.

An account may be given by the Excise Board of the number of reams of paper of each description for which the duty is paid, and of the number of pieces, or the square yards of printed or stained paper, as well as the quantity of each that is exported, as shown by the drawback.

Paper and  
Paper-  
Hangings.

The quantities of glass made should be supplied, distinguished into their several kinds, according to their rate of duty, as plate glass, flint and phial glass, crown glass, and common bottles, and there should be shown the quantities of each exported.

Glass.

These several articles are almost exclusively confined to home consumption, and the drawback on them is consequently inconsiderable; but both it and the duties, more especially the quantities of each article, may be furnished.

Starch,  
Vinegar,  
Sweets,  
Bricks, and  
Tiles.

These articles are subject to a duty so much exceeding the value of the imported commodity, that it presents inducements to contraband transactions, which are but imperfectly repressed by all the efforts of the officers of the revenue. It thus becomes difficult to form any statistical account of the actual consumption. The duties thus separated will show what of this luxury is used by the higher and middle classes in the form of segars and snuffs of foreign manufacture, and that used by the lower classes in the form of common tobacco and English snuff; and may, aided by other considerations, be made of use to show in what manner the several classes are relatively affected by taxation.

Tobacco and  
Snuff.

There are various articles which have been the subject of imposts which the alteration of circumstances has allowed to be given up; but though thus ceasing to be objects of revenue, a regard to them as long as they were subject to taxation becomes important to any statistical view that can be taken of our domestic production and consumption.

One of the most important of these is beer, the tax upon which has been very lately dispensed with, but the returns of which, distinguishing the different kinds of the liquor from which the revenue has been produced, will be of considerable use; and though the quantity exported is not very large when compared with that consumed at home, a return of the amount of the drawback is desirable.

Beer.

Printed calicos have been lately relieved also from the duty they had long borne. The

Printed  
Calicos.



accounts will show the number of square yards that have been stamped, and the drawback, when deducted, will show what portion has been consumed within the United Kingdom.

Soap and  
Candles.

The quantity of soap consumed in a country is one of those measures of civilization and of advancement on which much reliance may be placed. It is indispensable to cleanliness, and cleanliness commonly keeps pace with general prosperity. Perhaps the quantity of this commodity annually consumed in England, Scotland, and Ireland, may be no unuseful criterion of the relative advancement of the three portions of the United Kingdom. A considerable part of this substance is used in the process of fulling by the manufacturers of cloths. Upon that, whilst the tax was continued, a drawback was allowed. If that drawback, as well as the drawback on what is exported, be deducted from the whole quantity manufactured, the result will show the domestic consumption.

The quantity of candles made may have been affected by the great prevalence of lamps, and the more extended use of gas for lighting, both of which have been more common lately than they were a few years ago. The amount of the duty both on wax and tallow candles, with the drawback allowed on their exportation, will be useful auxiliaries to the purpose we are now considering.

Perhaps when the quantity of tallow annually converted into soap and candles is seen, and the quantity of that substance which is imported is ascertained, they, in combination with the number of skins that are converted into leather, may be made of use to frame an estimate of the quantity of animals yearly reared and providing animal food for our consumption.

Leather.

The tax on leather is another of those which have been recently withdrawn. The accounts rendered of it have been usually so framed by the Excise Board as to show the weight rather than the precise number of the skins of animals converted into that substance. If it be practicable to obtain the exact number of each kind of skins, it would be valuable in the view taken of it under the article tallow. At any rate, both the number and weight of the foreign skins might be obtained from either the Customs or Excise, or by a comparison of the accounts furnished by both Boards. The quantity of leather of all kinds exported under that specific denomination, might be easily ascertained, and would be desirable; but it would show an imperfect view, embracing only that part which is entitled to drawback. A vast quantity of leather is exported in other forms which do not admit of drawback, such as shoes, boots, slippers, bound books, saddlery, and articles which are forwarded to other countries in such small parcels, that where a drawback might be obtained, the amount is so trifling on each that it is not claimed.

Wine, Foreign  
Spirits, and  
Tea.

Besides the articles already noticed, there are others which, like tobacco, are of foreign growth, but, unlike it, require no manufacturing process to adapt them to the use of the consumer. As objects of finance, they are under the Customs; but the Excise have a supervision on the stock in the hands of dealers, and on the transfer of them from one place to another. These important articles are wine, foreign spirits, and tea. The quantities of these admitted to home consumption are accurately shown by the annual parliamentary accounts; and where only the amount of duty is stated, it will be easy to calculate the number of gallons or pounds, as the case may be, from the duty. It will also be easy to show the quantities of these articles annually transmitted from Great Britain to Ireland, which is important.



## CUSTOMS.

The commodities imported from foreign countries may be classed under three heads: 1st. Those which are alone the basis of our manufactures; 2d. Those which form a part of our manufactures, but mixed with others of the same kind of native growth; and 3d. Such as enter into immediate consumption without any manufacturing process.

Among the foreign articles which form the basis of our manufactures, cotton wool holds the first place, both on account of the number of labourers to whom it affords employment, and also from the value of the goods into which it is converted for home as well as for foreign consumption. As a tax is imposed on this raw commodity, the quantity imported, as well as what is exported in a raw state, is ascertainable with ease; but it is desirable to have those quantities classed under separate heads, either according to the countries whence they are brought, or according to the superiority of the quality, in which last case the best division, perhaps, would be into Surat cotton, Upland or Bowed Georgia, Sea Island, and Pernambuco; if by having the article so classed as to obtain the value of the whole mass, or an approximation to it, it would assist in a calculation of the annual amount of wealth created by this branch of industry.

Cotton.

As perhaps the augmentation of our national wealth created by this is to a greater extent than by any other manufacturing branch of industry, it seems to be of great importance to acquire more knowledge, and especially more precise knowledge, of the annual value of the goods made, than is at present possessed. It is of the more importance from the vast difference which is visible on a slight inspection between the amount of the raw material and that of the manufactured article which is exported, to say nothing of what is the amount of that which is used by every individual for the purposes of dress, furniture, and numerous other purposes.

The first step in the process of the manufacturing of cotton goods, that of spinning, is carried on for the most part in such establishments as are upon a large scale, where little or no jealousy can be of avail to prevent the knowledge of its power of producing the yarn. It can be no secret to the numerous persons employed, nor can it be concealed, whether in such mills they work at full, or at half, or a quarter of the time that they may be capable of working. There might be some assistance obtained by ascertaining the number of spindles in each of the cotton spinning mills. The great extension of the use of the power-looms for weaving might be made of some assistance. The work performed by machinery, whether in the spinning mills or in the power-loom factory, is so regular, so certain, and so ascertainable, that each might communicate the result of their operations with little inconvenience, and with the greatest exactness. The bleaching of the goods which require that operation, and the dyeing in the others, are executed by separate branches to a great extent, and in working places or establishments of a very extensive kind. From them returns of their operations would scarcely be refused if properly applied for, and the firmest reliance might be placed on their accuracy. As many of the larger establishments are conducted either by joint-stock companies or by several partners, there is little hesitation in making disclosures of their transactions.

Since the reduction of the duty on silk, the increased number of persons employed in con-

Silk.



verting it into goods of various kinds has made it a trade of greater importance than it was before, although, as the chief dependence for its consumption is on the caprice of fashion, it is necessarily more fluctuating in the demand for labour than most other branches of industry. This kingdom, from its great connexion with India and China, is become the chief market in Europe for the silk of those countries; and its importation and exportation from them are easily ascertained, as well as the quantities of that silk which Italy supplies, whether in a raw or organzined state. As the far greater part of the manufactured silk goods is consumed in the British kingdoms, it will be difficult to estimate their amount, or the annual amount of the value created by it. Besides those raw materials which form the basis of important manufactures, there are some auxiliary articles of foreign growth which may not be undeserving of notice: they are dyeing drugs in general, but two are especially prominent.

Indigo.

There was a time when indigo was supplied to the European manufacturers by the western world. Our own colonists extracted some of this die, but the better part in quality, and the larger in quantity, was chiefly supplied from those countries which were then the Spanish dominions, especially from Caraccas and Guatimala. Within the last thirty years, since the cultivation of the indigo plant has been improved in India, the greater part of Europe has been supplied with the die from the British dominions in that quarter of the globe. England has, from this change of circumstances, thus become the great depôt for the commodity, and our own manufacturers have the power of procuring it on somewhat better terms than our continental neighbours. The difference between what is imported and what is exported will show the consumption of it in our own manufactures. As there are scarcely any substitutes for it in any other substances, it may be made use of beneficially; it becomes, in conjunction with other articles, a test of the increase or decrease of our manufactures.

Cochineal.

Another dyeing material, cochineal, was formerly more fit to be adopted as a test of the increase of our manufactures than it has become of late. The introduction of lac lake from India, and its great use as a substitute for cochineal, have caused a diminished consumption of the latter article, and render the demand for it a less adequate measure of the progress of the several fabrics to which it is applied.

Oil.

The olive oil, supplied chiefly from the coasts of the Mediterranean, is much used in the cloth manufacture, but it is also applied to so many other purposes, and so many substitutes are found applicable to the same purpose, that it is now difficult to obtain such exactness in the actual consumption in manufactures as to make use of it as a test of their prosperity. The commodities imported from foreign countries, which, in conjunction with articles of the same description produced within the United Kingdom, form the basis of our manufactures, are large in quantity and valuable in amount.

Wool.

One of the most important of these is sheep's and lambs' wool. The quantity of this, and, by the present rate of duty being at different rates, according to the value, the quality, in some degree, and the quantity accurately, is easily ascertainable; but it is difficult to calculate what proportion the foreign wool used by our manufacturers bears to that of our domestic growth. Of the quantity produced from our own flocks we have no certain means of knowledge. We know, indeed, that with the exception of some of the long or combing wool, which, by a late law, is permitted to be exported, the whole of our home-grown wool is consumed by our own



fabrics; and thus we ascertain that the increase or decrease of the importation may, in some degree, mark the advancement or decline of our production of woollen goods.

It is only by ascertaining the number of the skins of sheep and lambs which have been charged with duty, when the Excise Office collected that tax, that an approach can be made to any accurate calculation of the quantity of English wool annually produced. If that could be obtained, the average proportion of sheep slaughtered to those which are shorn, and the average weight of each fleece, might be made to form the foundation of an estimate which would be sufficiently correct for the practical purpose of showing that an increase was proceeding, and, though with less correctness, the rate of such increase. It has been maintained, that from the greater value of the meat than of the wool, more attention has been paid in England to the improvement of the former than of the latter, and that the consequence has been a gradual decrease in the fineness of our own wool, which has caused an augmented demand for the fine wools of Spain, of Saxony, of Prussia, and the other parts of Germany, to be mixed in larger proportions with our own wool in making the finer cloths. The great antiquity of the woollen manufacture,—the celebrity which English cloths have long enjoyed,—the great extent of the capital employed in it,—the numerous individuals to whom it affords occupation and subsistence, and its direct influence on the interests of agriculture—all give a degree of importance to this subject which makes a more intimate knowledge of the extent of its productions, and of the decrease or increase of them, highly desirable. It can scarcely be acquired by mere statistical returns, but other methods to obtain the end may be adopted and usefully employed, for acquiring the requisite knowledge. The returns from the Cloth Hall at Leeds, or of similar institutions in other places, afford very incorrect means of obtaining the desired information on this subject.

The linen manufacture, both in Great Britain and Ireland, is supplied with flax, in part from our own soil, and in part by importation. The quantity grown within the two divisions of the United Empire is less capable of being ascertained than that supplied from foreign countries. A great change has taken place in the nature of this trade of late years. Formerly the lower classes in England used almost exclusively German linens, called dowlass, for the body clothing and for bedding; Russian hempen-cloth and diaper for towels; and packing was commonly executed in a coarse linen, named, from the part of Germany where it was fabricated, hessens. These have been nearly superseded in our home consumption, either by stout cotton goods or by linens of our own manufacture. A great step in advance has been made in England and Scotland, and a moderate one in Ireland, by the application of machinery to the process of spinning flax; and the extent of it may be seen in the increased quantity of British linen exported, and would be more striking if there were any means of ascertaining the annual quantity supplied to consumption within the kingdom. The weight of flax imported, with the number of yards of cloth exported, may be useful in framing an estimate of the trade, and would in some measure show its increase; but it is desirable to obtain some more explicit knowledge of the number of spinning mills, of their capacity for producing yarn, and of the number of power or other looms employed in this fabric. The means of acquiring this knowledge will be comprehended in suggestions on the other branches of manufacture in a subsequent part of this paper.

Flax.



**Hemp.** The consumption of hemp for cordage, in our commercial and our military marine, is so much more largely supplied from foreign countries than from domestic cultivation, that the latter is scarcely deserving of attention. Cordage, twine, and some other articles made from this plant, are fabricated in such various places, and upon such different scales, that it would be extremely difficult to procure any satisfactory statistical accounts of the weight or the value of those goods. It will therefore become necessary to rest satisfied with learning the quantity of the raw article annually imported.

There are various smaller foreign articles that enter into the composition of manufactures, in a greater or less degree, when combined with raw materials. Although none of them ought to be overlooked in a statistical view of our wealth and our consumption, yet it does not seem necessary to enumerate or to make any remarks on them in this recital.

**Nitre and Sulphur.** There are two articles, indeed, which are of more eminent importance on account of the great value they acquire as being indispensably necessary to the national defence. They are nitre and sulphur, whose chief value arises from being the component parts of gunpowder, but are of consequence because they enter into many articles of manufacture, in which they are of great use, to say nothing of their application in many medicinal compositions. As these are subject to duties, the quantities of both annually imported can be easily furnished.

**Iron.** Although for some purposes the iron of Sweden is required, and some of the produce of Russia also, yet the quantities of them together bear so small a proportion in the several British manufactures to that which is afforded by our own means, that the article of iron might be almost considered as one of those whose basis is alone of domestic creation. Not fifty years ago, the foreign iron introduced into this country very far exceeded that of our fabrication; and since that period our exportation of British iron has been increased tenfold. In the numerous manufactures of the kingdom the proportionate increase of British iron is supposed to be much greater than in the exportation of it. The vast increase of the trade in iron, as well as of the other metals, may be fairly inferred from the great increase in the numbers of the inhabitants in the towns, and the villages surrounding them; as is manifested by the census of 1801, compared with that of 1831. In the period of thirty years, Birmingham has grown from 73,670 inhabitants, to 146,986; Sheffield, from 45,755, to 91,692; and Wolverhampton, from 25,536, to 48,080: whilst the large villages in their vicinity, carrying on similar trades, exhibit a similar extraordinary augmentation of their inhabitants. The districts of England and Wales where the raw iron is produced, appear also to have increased in at least a similar degree. The number of persons to whom the iron trade yields occupation and subsistence, and the large capitals employed in it, make its progress an object which merits great investigation. It may be difficult, and almost impossible, to arrive at any satisfactory approximation of the wealth annually created by this branch of industry. The articles fabricated are so numerous and so minute, and the proportion in which the value of the labour in many of them surpasses that of the raw material is so great, that no attention that could be devoted to it could reduce it to any very accurate statistical form.

The raw material, however, may, with more approach to accuracy, be successfully made the subject of examination. The iron works are mostly extensive establishments, either with many partners in each, or belonging to joint-stock companies. From the nature of such a proprietary, there can be no great secrecy observed; and the extent of their operations may



be easily obtained. In the works carried on upon a more contracted scale,—if from the apprehension that the information is sought for the purpose of taxation, and on that account should be refused,—the annual quantity of coal consumed may be acquired, and would show nearly the number of tons of iron made in each year. The nature and construction of the works would show whether the product was cast or hammered iron.

It is gratifying, when looking through the list of our imports, to observe how few are the articles among them which enter into immediate consumption, when compared with those which undergo some manufacturing operations previously to their being used. Except the occasional importation of corn,—caused by a deficiency in the product of our own harvests, which is by no means a common occurrence,—none of the imported articles are so costly as wine and tea. Foreign spirits, before the duty is paid, are of little value; and the other commodities, consisting of butter, cheese, India cotton, piece goods, currants, raisins, oranges and lemons, spices, figs, rice, clover-seed, smalts, and medicinal drugs, are altogether of small value when compared with those which require the addition of labour. In the years in which no corn is imported, the articles which pass directly into consumption do not amount to the value of more than one-seventh of those which pass into manufacturing hands; and that amount consists chiefly of the two articles already mentioned, viz., wine and tea.

Those articles only have been hitherto noticed, which, from having been subject to the Excise Duties, afford some means for ascertaining their quantities, or from being partly of foreign growth, and their passing through the Customs, furnish a clue by which to estimate them. There are productions of our own soil which are subject to no financial supervision, but, notwithstanding, increase the wealth and the comfort of the empire in a degree which renders them deserving of an especial summary review. They are the products of our own soil, and either applied to manufacturing purposes, and thus form some valuable branches of trade, or they are exported in their raw state, to the great benefit of the community.

The most valuable of such productions is coal. This substance is found in so many of the counties, that it is difficult to arrive at any very accurate estimate of its quantity at this time, or at the increased production of it from year to year. Whilst the duty on sea-borne coals was continued, the quantity was easy to be ascertained, as well of them as of what was exported to foreign countries; but these form a very imperfect scale by which to estimate the annual number of tons extracted from the mines. The largest portion of the consumption of coals exists near to the spots on which they are raised. The various manufactures whose prosperity depends on economy in the supply of fuel, were established, originally, near to the mines; and of late years there has been a constant tendency in all manufactures to remove from the districts where coals are not to be found, to those where they are in abundance; and this migration of manufactures has been accelerated since the power of steam has been applied to mechanical purposes. There are few subjects on which our statistical knowledge is less perfect than on the quantity of coal produced within the kingdom, and there is none on which an accurate knowledge is of more importance. The consumption of it is a sure criterion of the advancing or declining state of our manufactures, as well as of the improved or deteriorated condition of the inhabitants of those other parts of the empire in which that valuable fuel is not afforded.

Coal.



Though many coal mines are worked in some parts of the kingdom upon a contracted scale, those most productive have large establishments. Such require accurate accounts to be kept for the information of the proprietors, and as measures of the industry and integrity of those employed in their management. By them no repugnance would be felt to regular disclosures of the quantities they annually raise. As the whole duty on coal is now abandoned, and there is no probability of its being again imposed, no apprehension of taxation would be likely to prevent the owners of even the smallest mining concerns from making known, if applied properly to, the amount of the quantities they extract. The means of gaining and concentrating this information will be noticed under the more general view of the subject hereafter.

**Salt.** Another of our native products of much value is salt, which is made either from saline springs, of which we enjoy some fully saturated, from rock-salt dissolved and then evaporated, of which we have very productive mines, or from sea-water; or, in some instances, from the brine formed by the two latter. This article has, from the most remote ages, and in all countries, been deemed one of the most fit objects of taxation. In this kingdom strong inducements caused the repeal of the tax a few years ago. Before that repeal the quantity for home consumption, on which the tax was paid, of that for the fisheries delivered under bond, and of that exported to foreign countries, may be found by reference to the parliamentary papers of successive years. The consumption, and the consequent production, have vastly increased since the tax was repealed; and, what was worse, the restrictions on the delivery of it for purposes where no duty was imposed, have been taken away: but of the degree of that increase we have no means of forming any estimate. The facts may, however, perhaps be obtained by the same means as those relating to other articles under similar circumstances.

**Fisheries.** During the continuance of the tax on salt, it furnished useful statistical information respecting that valuable branch of industry—the fisheries. Though not in the exact place where that topic might be best introduced, it cannot be altogether irrelevant to notice it here. Salt was delivered to the fishermen, free of duty, on their entering into bonds; which bonds were discharged on producing salted fish of the various kinds, in proportion to the quantities of salt which had been delivered to them at the commencement of their fishing expeditions. By this mode of conducting the business, it became easy to ascertain both the quantity of salt used, and the quantity of fish taken and cured. A reference to those accounts will show the extent of the herring-fishery, which can only now be learned from the number and tonnage of the vessels equipped at Yarmouth, Folkstone, and other places in England, and at the several towns in Scotland.

**Potteries.** The manufactories established in some extensive districts, and in many detached parts of the kingdom, for earthenware, are supplied with the raw materials of their fabric almost exclusively from our own soil. As those materials are thus neither subject to Excise nor Customs Duty, their value, as well as of the finished goods into which labour and fuel convert them, can by no means very accurately be made the subject of calculation. The exportation of this article, created from such native raw material, is of great money value; but its benefit to the community cannot be estimated by that value alone. Being an article of little cost in comparison to its bulk, it is made use of to gain some freight for ships that



would otherwise leave the kingdom in ballast, or with very small cargoes. It is well known that, from our general productions being of greater value (in proportion to their weight and bulk) than the articles furnished to us from other countries, the vessels which convey them to our ports cannot find sufficient goods to load them back. This inconvenience is in some degree lessened by the cheap rate at which our earthenwares are afforded.

The foreign demand for this branch of our manufactures is, however, far less than that required for the domestic supply of those fragile wares. Some indication of the increase of this trade may be found in the rapid increase of inhabitants in the districts which are chiefly employed in conducting it. It would require some personal inquiries into the nature of this manufacture—into the relative value of the several component parts—and into the proportion of the cost of the labour, to frame any plan by which even an approximation could be obtained of its extent and increase. It is, however, notwithstanding the present ignorance, a subject which must deserve future consideration.

The metal peculiarly, but not quite exclusively, of British produce—tin, is found in such abundance as to yield much service in various manufactures, and to allow of a considerable exportation of it, in its unmanufactured state, to foreign countries, chiefly to China and India. Though some foreign tin is introduced, it is solely for re-exportation; and that of our own soil is applied as a coating to other metals, and converted into various utensils, both for domestic and foreign consumption. Particular attention only has been paid to the exports of the raw article, as shown by the returns from the Custom-Houses in the parliamentary papers. It is probable that the Stannary Courts, in Cornwall, may be able to show the specific quantity of the metal produced in each year, or may furnish some clue to satisfactory information on the subject.

Tin and  
Copper.

Copper is not in the same predicament as tin, as a small part of what is consumed in our manufactures is of foreign production; but as the larger portion is afforded by our own mines, it may not improperly be classed with that metal, especially as the chief of the mines are in the same division of the kingdom as those of tin; and the sources of information respecting the quantity annually yielded are the same. The permission given to the smelting of copper ore under bond for the purpose of exportation, has produced a great import from Chili of that ore, the result of which has been, in some degree, unfavourable to our own mines.

Lead deserves notice. The trade in it is in a state of transition, on account of the greater richness of some mines in Spain which have lately been extended.\* What is now exported is chiefly in a manufactured state.

Lead.

There is one branch of industry of an anomalous character which well deserves attention—that of building houses. It is as much a manufacture as that of weaving cloths or forging iron implements, and, in its increase, has kept pace with the increase of all other means of creating wealth. It is of importance, because it is the best evidence of a previously accumulated capital, and it is one of the modes by which additional capital is created, which capital is distributed among the several classes of the people, who prepare the various component parts applied to the construction, so as to benefit the whole community.

Building  
Houses.

\* Since this paper was drawn up, a great defalcation has again occurred in the Spanish lead mines, and the price has so much advanced as to present new and strong inducements to extend the operations of the English and Scotch miners.



Shipping. The number and tonnage of the ships belonging to the empire are so accurately registered, that it would have been unnecessary to have done more than barely refer to those accounts, but for the connexion there is between house-building and ship-building as far as regards the supply of timber for both purposes. It would be desirable to know what proportion the timber of the production of our own soil, used in these two branches, bears to that which is imported from other countries, including both our own colonies and foreign territories. The difficulty of arriving at an accurate result on this topic is certainly great; but it ought not, on that account, to be overlooked, since, if precision cannot be attained, such an approximation may be made as would become of considerable value.

Timber.

Agriculture. The quantity of corn imported from foreign countries will show the difference between our production and consumption in a series of years of deficient harvests, when they occur; but neither the quantity grown, nor the excess in those years, when they occur, in which our harvests are superabundant. We are equally unacquainted with the other products of agriculture within the kingdom, such as meat, tallow, butter, cheese, potatoes, turnips, hay, seed oils, hemp, flax, and the smaller valuable articles which are obtained from our rural industry.

It is certainly desirable that a board of trade, under whose direction the legislation for exterior and interior commerce must be guided, should possess, if not absolutely exact knowledge on this subject, yet such as can be with any certainty obtained. The acquisition of this knowledge may be facilitated by the machinery for collecting it being already in operation, having been made use of four times successfully, and satisfactorily to the public and to the persons employed, and applied to ascertain the numbers, sexes, ages, deaths, births, and marriages of the inhabitants of this kingdom. It would be much easier for the overseers of the poor in England and Wales, and for the schoolmasters in Scotland, to obtain and communicate information respecting the more prominent and valuable articles of rural economics than it has been to obtain the knowledge of the numbers, ages, and other circumstances respecting the inhabitants. In one case it is necessary to go from house to house to communicate with many who can neither read nor write, and with others who have but uncertain knowledge; and thus to consume a considerable portion of their time. In the other case, in most of the rural districts, the occupiers of the soil are few in each parish; no secrecy of their operations is attempted; for the most part, the cultivators are men of good professional information, and a reluctance to the disclosure of every fact would be rarely to be encountered; and where such did present itself, the proprietor of tithes, whether clerical or lay, would, generally with readiness, communicate the desired information.

Nothing more would seem to be necessary than to add to the valuable queries which were circulated at the last census some additions regarding the actual stock of agricultural property, and the course of husbandry generally pursued.

Such queries may be of the following kind. What number of acres in your parish are arable, pasture, meadow, or woods? What is the usual rotation of crops on the arable land? What extent of common is in your parish, and is it heath, down, or meadow? What number of acres are commonly devoted to grow potatoes? What are the numbers of the cows, calves, and bullocks, of the sheep and lambs, of the agricultural horses and colts? Some other queries may, on subsequent consideration, perhaps be added to these, but the answers to them would



afford most valuable helps to inquiry. The knowledge of the rotation of crops would show the acres in wheat, barley, oats, and other kinds of grain, as well as the intervening green crops. We might thus frame calculations, allowing for the variations in the fertility of seasons, and arrive at the proportions of corn from our own soil to our usual consumption. From the returns of cattle, we might calculate the production of meat, of tallow, of skins, of wool, of butter, and of cheese, and thus not only be able to know how near the production and the consumption of those articles approach each other, but also their increase from one period of their enumeration to another. Some other queries might be added on such subjects, such as the number of paupers, the expenses of maintaining them, and the rate of wages for day or piece labour. As, however, some years must elapse before this machinery will be again put in motion, endeavours must be used to obtain, in the interval, the best information that can be procured by the means now furnished.

One of the means by which wealth has been created within the British empire, has been the establishment of colonies. They have been gradually peopled by persons who are almost exclusively cultivators of the earth, and acquirers of such agricultural products as from the soil and climate can be raised with more facility in them than in the parent country. From cultivation being most beneficial in their condition, they have scarcely produced any manufactured goods, and thus have continued to obtain such goods from the country from whence they originated. The exchange of their raw produce for such articles has been found mutually advantageous. From the force of habit, a change is slow, and though some of our colonies have become independent states, yet, after the lapse of more than half a century, the exchange of their raw produce for our productions supports commercial operations between Great Britain and those states which are of larger extent than exist between any other two countries on the globe that are not under the same government. It is not intended here to discuss the abstract subject of the benefit of colonization, but to show the importance of ascertaining the actual state of those we at present possess, as far as regards their consumption of our various products. There is a great difference between the condition of the people in our several colonies. In the northern part of America, in the Canadas, and in what was once collectively denominated Nova Scotia, the great mass of the inhabitants are small proprietors, subsisted by their own labour in the cultivation of their own lands. In the West India islands there are a few large proprietors who subsist by the labour of numerous negroes in a state of slavery. No two conditions of society can be seen between which so little similarity is observable; yet in both they agree in purchasing and consuming, almost universally, the manufactured articles, of all but the simplest kind, prepared in the European country to which they belong; and, for the number of the inhabitants, they give employment to our industrious classes beyond what is derivable by Great Britain from the same number of people in any other countries.

The returns of all that relate to our colonial possessions are so amply communicated to the colonial department that sufficient materials must be found there to supply most of the knowledge that can be required concerning their progressive and actual state. If, on investigation, other facts should appear to be desirable, they may doubtless be obtained with great facility.

Colonies.



Having hitherto paid attention only to those several sources from which the wealth of the country is mainly derived, it might be proper to notice the reverse, and communicate some observations relative to the acquisition of accurate knowledge of each of the larger branches of the public expenditure, as well as of that of the several classes of individuals that compose the community. Before, however, entering on that division of the subject, it may be most desirable to consider the best means of obtaining accurate accounts of those large sources of wealth which are wholly, or in a great measure, exempt from all financial supervision.

As a foundation on which to build up future regular accounts, it would be necessary to collect the accounts of past periods. These are amply, and even superabundantly, supplied in several hundred volumes of parliamentary papers and parliamentary proceedings. The arrangement, the abridgement, and the concentration of the multitudinous papers in these volumes would be a work of vast labour. It happens, however, fortunately, that the far greater part of this labour may be dispensed with, or has been already applied. A digest of these papers, framed for sale, is now in progress, and the first volume of it has been already published. It appears to be drawn up with great industry and accuracy, and would beneficially anticipate much of that application which, without it, must have fallen to the lot of a statistical department.

With this basis for past transactions, it may be considered in what manner the continuation may be conducted and extended.

Where the machinery of office is already in existence, when its working is known, and has been approved by experience, it seems better to extend the application of that machinery to fresh objects, than to construct such as are wholly new and untried.

The department under the management of the Commissioners of Excise, is conducted with great simplicity, accuracy, integrity, and economy. The discipline of all the officers, from the highest to the lowest, is maintained by a system of supervision which begets and perpetuates a very great degree of attention to sobriety and civility, of strict obedience to orders from their superiors, of abstinence from promiscuous society, and of economical expenditure in their personal gratifications. These moral qualities of the inferior officers are created and strengthened by the knowledge that the diary of each man is examined by the highest officers, and is compared with the diaries of others immediately above, and who watch over them; so that almost every hour of their time must be accounted for, and thus idleness or dissipation can scarcely ever pass unnoticed.

There is no town in the kingdom in which some of these quiet but active instruments of revenue are not to be found, and scarcely a village which is not, in turn, visited by them for the purpose of performing some official duties.

These officers might be made of use without imposing on them any very onerous additional duties or with none, or, if any, in a very few cases, but a trifling augmentation of their number. Their salaries are, however, but small, and, in most instances, a very small gratuity would be felt as an ample compensation.

Whatever jealousy may have existed towards the officers of excise in the last generation, it has now disappeared, or is almost exclusively confined to those who attempt fraudulent practices. Among the larger class of manufacturers especially, they are often found a protection



against the tricks and deceit of the workmen they employ, and this is generally acknowledged by the larger maltsters, distillers, and tobacconists, as it was, whilst the taxes on them were continued, by the salt-refiners, the brewers, the soap-makers, and tallow-chandlers.

As there is nothing in the kind of business, (in which it is suggested that these officers might be employed), and nothing in their description or behaviour that would be likely to make their applications appear odious or impertinent, they might be directed to obtain, as far as possible, correct information from the several conductors of large concerns in the respective parishes which they are in the habit of visiting for the purposes of revenue. Few, if any, of those conductors of extensive operations, when the objects of inquiry were fairly stated, could be found who would be unwilling or unprepared to afford the correct information required. If any should refuse to impart the answers required, it would be no difficult task for the officer of excise to obtain the desired information from other quarters, always in his reports stating what he received from the parties interested, and what from other sources, and the degree of credit which he gives to each respectively.

Mines.

The first subject of inquiry suggested may be the mines. Those of coal are the most numerous as well as the most extensive; a simple return of the quantity extracted would be sufficient, unless it should be thought desirable to distinguish coal from culm, a distinction less necessary now than formerly, from the duties on both having been repealed.

The chief mines of iron are wrought in the vicinity of coal mines, and the inquiries may be conducted by the same individual officers. The number of tons of iron made should be simply classed under the two heads of cast and hammered iron, or some other distinguishing names.

The returns from the mines of tin, copper, and lead, might show the gross quantity extracted from each. As most of the copper raised in Cornwall is sent in the form of ore from thence to Wales, to be smelted, a distinction should be made between the two heads of produce.

In the inquiries respecting the quantity of culinary salt, it would be desirable to have the different modes in which it is made classed into that boiled from spontaneous saline springs, as at Droitwich, that made from a solution of rock salt, as in Cheshire, and that boiled from sea water, as at Lymington and other places on the sea-shore. This, though in some cases it might be desirable, is of little importance compared with the ascertainment of the actual quantity produced.

The inquiries into the condition of manufactures of piece goods will demand more minute attention than that of the branches of industry already noticed. In the cotton trade, the first operations of carding and spinning are performed almost wholly by machinery, and in large establishments. It would be desirable to know in each the number of persons of all ages employed, the number of spindles, the minimum and the maximum of the working hours, and the average hours of actual work in the three preceding months. If the quantity of yarn, and the fineness of it could be obtained, it might be made the foundation for a tolerably accurate calculation of the value of the whole manufacture. The next step in the process, that of weaving, is generally now performed by power-looms, and the number of pieces woven in them might be obtained from the several proprietors of the works. The bleachers, also,



would probably give their returns of the pieces which passed through their hands. If even imperfect accounts were rendered, yet, by having three sets of returns made in the three steps of the process of manufacturing, each of which would be a check on the others, it would render grounds for a valuation on which some reliance might be placed. The dyeing and finishing of fustians, the printing of calicos, and the embroidery of muslins, all branches of the cotton trade, ought to have such attention directed to them as should enable the Board of Trade to ascertain nearly their depressed or flourishing state; though it might be difficult to reduce it to statistical precision.

In the woollen branch of clothing, all the spinning, and some of the weaving is performed by machinery. As far as regards the first of these operations, tolerably accurate returns may be obtained; but the latter is executed by so many small workmen in the villages which surround the great clothing towns, that it will be difficult to procure any very precise accounts from any efforts of the officers of excise. The operations in the woollen manufacture subsequent to the weaving, such as fulling, shearing, dressing, dyeing and finishing, are rather complicated, and would require some acquaintance with each step, and the proportion of the cost of them to the value of the raw material, and to the finished goods. These could not be expected to be found among the officers of excise.

The linen trade is in the course of the manufacture much more simple than either that of cotton or of wool. It consists chiefly of spinning, weaving, and bleaching alone. There are few of what are denominated fancy goods made, and one kind is mainly distinguished from another by the fineness or coarseness of the yarn, and the skill exercised in the bleaching. In the western counties of England, this trade is still worked by hand, except as regards the spinning; but, in the northern counties of England, and especially in Scotland, machinery for weaving has been most extensively adopted. Even in Ireland, where the linen fabrics were till recently made by human labour, machinery has been gradually coming into use. When manufacturing operations are conducted by machinery, they are upon such a scale, and so equably performed, that they are favourably circumstanced for rendering statistical accounts of the results of their labour.

The first productions of our minerals have been slightly noticed under their character of raw produce, in which respect, great as their importance undoubtedly is, it is insignificant when compared with that to which they attain by the application of labour when they are transformed into articles of necessity, of accommodation, of ornament, or of luxury. If we were accurately informed of the quantities or value of all the iron, copper, tin, lead, and other minerals which our mines yield, we could scarcely acquire so much knowledge of the general prosperity which is created by them as might be gained by even a slight but regular intercourse with some of the more intelligent persons who are engaged in the different branches of the manufacture. The manufacturers of jewellery and gilt toys in London and Birmingham, not including those who work in gold or silver, are stated to amount to more than fifty thousand persons, who make goods to the value of more than two millions annually, the cost of the raw materials of which does not amount to a fiftieth, perhaps not to a hundredth, part of that sum. If no other branch of the metal trades shows so great a difference between the value of the raw material and the marketable article, there are several others that nearly



approach it, and some few which go beyond it. When by any of the branches of industry the beneficial application of labour is productive of wealth, the steps which lead to the results, and the extent to which they are carried are worthy of notice.

The manufactures of earthenware have been briefly noticed before. They have never been made a source of revenue, and, perhaps on that account chiefly, have scarcely ever called any part of the attention of government towards their operations. The raw materials are of little value beyond the expense of digging, and of conveying them from the pits to the places where they are converted into goods. The chief of those materials is the pipe-clay of the isle of Purbeck, in Dorsetshire, which is shipped within the port of Pool, and carried to Bristol or Liverpool, and from those places, by the canals, to the potteries. The quantity of the pipe-clay so shipped may be seen by the coastwise books of the customs. Another material is flint, which is reduced to a fine powder in powerful mills. The number of mills constructed for this operation is small, and the quantity of work they perform may be readily known. Lead, salt, and colouring drugs are also used as component parts of the manufacture. The materials bear a slight proportion in value to the labour which the trade employs; and as a great portion of that labour, especially in the superior descriptions of china, is performed by females and young persons, the whole trade is one of great national importance. Some parts of the ware are formed by the turning machine, and some of the printing also is executed by machinery; but the talents of the inventors and improvers of these fabrics have addressed attention more to chemical subjects, to ascertain the properties of earths, and the best combinations, than to mechanical contrivance to spare human labour. The nature of this trade, its extent, and the amount of the wealth annually created by it, deserve minute and direct attention.

The five subjects immediately touched upon have many circumstances in common, out of which some suggestions present themselves for consideration. These manufactures have, perhaps, been among the chief sources of the wealth with which this country abounds.

Without entering into the difficult question of the extent to which they have been the causes of wealth, their condition and progress from time to time become an object deserving such constant attention as that those at the head of the commercial affairs of the country should never be unprepared to give a compressed, but accurate representation of their state. Documents should be always ready, not prepared for the occasion, which might produce suspicion, but in a regular series, to which reference might be had whenever appeal to them becomes desirable, and on which the regularity, clearness, and accuracy, they should exhibit would gain for them confident reliance. Such documents could only consist of official returns from the several departments of government, most of which are noticed in this paper. These should be made quarterly in future; whilst, for the past time, the annual printed accounts in the parliamentary papers should be made use of as the foundation of a series of data, whose value would improve by every addition made to them.

If the suggestion already submitted of making the officers of excise available for the purpose of procuring statistical accounts should be approved, they also should make their communication quarterly, which should be also registered.

By these two measures valuable facts would be collected, not only useful in themselves, but highly advantageous when combined with statements drawn from other sources.



An extensive correspondence should be maintained with the most intelligent and assiduous individuals engaged in the several branches of manufacture, and the office in which the returns from the departments of government are to be preserved and registered. The value of such correspondence would mainly depend on the skill and discrimination with which the selection of proper persons from whom to draw information is made; and such selection could scarcely be made with due judgment without some personal acquaintance, which only visits to the manufacturing places might enable a public officer to make. The benefit of such visits may be illustrated by the copious and accurate information, collected on a late occasion, when one of the secretaries of the Board of Trade was so judiciously occupied in examining the state of the manufactures in some of the northern counties.

In each branch of our manufactures, and in all the divisions of those branches, there are to be found some men of practical knowledge, of inquiring habits, and of acute observation, who, from attachment to the subjects on which their thoughts are chiefly employed, would readily, at no expense, communicate with any public board, or the Statistical Society, periodically. From such persons quarterly information might be gained, which, when compared with each other and sedulously examined, would give the true representation of the state of the trade at each period.

To persons thus selected queries might be addressed, a sufficient time before each quarter-day to allow of replies, so framed as to apply to the exact condition of the particular trade at the time of the inquiry. Such queries could not be framed, nor the answers to them be rendered, in all cases, easily intelligible, without a previous knowledge, not only of the great features of the respective manufactures, but of the several processes between the first operation on the raw material and the completion of the goods into which it is converted.

The mode in which such an examination as is here suggested may be best developed, is by showing how it may be adapted to a particular branch of trade; and as one of the most important, that of hardware may be as proper as any other for the purpose. The copper and tin of Cornwall, the iron of Wales, of Shropshire, and other counties, are conveyed to Birmingham, Wolverhampton, Sheffield, and the other large towns. The returns of the mines may be obtained from them, and of the coals also from the pits, and the tonnage on the canals by which these heavy articles are conveyed, may be periodically collected. Though some knowledge of the fabrication of iron, and of the smelting of the other metals, may be presumed in the department destined to conduct the inquiries; yet all the alterations and improvements, as they are made, ought to be familiarized, which can scarcely be done without occasional personal intercourse. Such intercourse is, however, more requisite when inquiries are to be directed into the application of these metals, thus brought together from various parts, to the various articles furnished from the hardware manufacture. These branches are numerous, and differing from each other in importance as great as the difference between the weight of an anchor or chain-cable, and that of the smallest pin, or the steel-chain by which an eye-glass is suspended. It is not to be supposed that any individual, or a few individuals, should comprehend all the minute parts of such fabrics; but it is desirable that such an inspection should be taken as to produce the habit of discriminating between what is of great, and what is of little moment; for without such discrimination, the fullest reports would be rather the means of confusion than of elucidation. Thus, for instance, in the hardware



trade, some of the quarterly reports might represent one branch to be declining, whilst others might represent some other branch to be in a flourishing condition. Now, without some previous knowledge of the relative importance of one of them to the other, it would be difficult to draw to a focal point the periodical statements of the whole branch of this manufacture of hardware. Similar remarks may apply to the cotton, woollen, and linen trades, as well as to those of earthenware and glass.

Such intercourse and correspondence as is here submitted to consideration, would, at first, require much knowledge, labour, and attention; but, when once fairly set in motion, the machinery might be conducted on a more plain and simple manner than would be possible at its first construction.

It may be apprehended that some feelings of the nature of commercial jealousy might interfere to prevent the communications which have been described as desirable. It may, however, be observed that, among manufacturers, especially those who conduct the larger establishments, though there may be a disinclination, or even a repugnance, naturally opposed to a disclosure of the modes of their operating, there is little or none as to the extent of it; and the extent is nearly all that is desirable for the purpose under consideration in this paper.

There are secret practices in many branches of manufacture which scientific research enables some men to make honourably subservient to their individual gains. The possessors of them may be unwilling to make a premature disclosure; and in whatever intercourse there may be between the department in question and such persons, too much care could not be taken to avoid any appearance which could be construed into an attempt to extract that knowledge which the persons interested are desirous should not be communicated.

The present time is favourable for the introduction of such a system of general inquiry as is here suggested. It is well known that even where there is full employment in trade, the rate of profits is now extremely low. It is not the object of this paper to enter into any examination of the causes of this, or of the effect of it; but the fact is beyond doubt. Now those who work for little profit, have less wish for concealment than those who make large gains by their operations, but, on the contrary, will generally feel disposed to make free communication.

Another suggestion connected with the evidence of the increase of general wealth may be here submitted to consideration, which bears a resemblance to the practice of every enlightened merchant and trader. It might be advisable that the Customs should make returns of all bonded goods under the King's lock in the several ports of the United Kingdom, specifying the quantities of each kind; and, in addition to this, the Excise should make returns of the stocks of all articles in the hands of traders under their supervision. Such returns should be made each quarter, so as to correspond nearly with the dates of the reports and returns which have already been recommended. The knowledge of the stock of such vast masses of commodities, would give a fair specimen by which to judge of the increase or decrease of those other commodities which are not susceptible of similar enumeration. The possession of this material kind of stock is a more certain criterion of the amount of wealth than the possession of money, whether of the precious metals, or of paper convertible into them at all times. They are themselves accumulations the most sure representatives of labour. The

Returns of  
Stock of  
Goods.



exhibitions of such accounts of stock on hand, when compared with the returns of the annual importation or proportion, as the case may be, from the two offices mentioned, would lead to solve the question if any glut that may be a subject of complaint is a natural or an accidental one, or will show if the spirit of speculation has been carried too far. This account would of itself be beneficial to the public as well as to the Government, but in combination with the others already suggested, would in time become of vast importance.

Only those branches of the public service have been hitherto noticed which are productive of revenue, but those which are merely departments of expenditure ought perhaps to be included in statistical representations. They are the navy, the army, the ordnance, the courts of law and of police, and the expense of the coinage; but as the accounts of those branches are annually laid before Parliament, it does not seem necessary to do more than to notice each of them.

It would, however, be desirable to collect and arrange the state of crimes, of insolvency, and of mendicity; and the amount of county-rates, of church-rates, and especially of poor-rates, in each county.

There are other accounts which it is difficult to arrange under distinct heads, which may be of considerable benefit in showing the increase of wealth from one period to another. One of these is the amount of the tonnage which passes along the several canals of the kingdom, and the tonnage admitted into the artificial docks of London, Liverpool, Hull, Bristol, and other places where they have been constructed. These are no secrets, and would doubtless be supplied quarterly or yearly by the directors of the respective undertakings. The amount of money invested in the several savings' banks in the kingdom, classed according to the amount of the several investors, would throw light both on the accumulation and the distribution of capital. Some valuable information may be drawn from the Bank of England, which would be of use to show the distribution of that description of property denominated the Funds. Returns might be obtained to show the number of persons receiving dividends in each half year; showing how many of them have under £5, how many from £5 to £10, from £10 to £50, from £50 to £100, from £100 to £200, from £200 to £300, from £300 to £500, from £500 to £1,000, from £1,000 to £2,000, and above £2,000. An account might also be obtained to show the amount of stock standing in the name of the Accountants-General of the Court of Chancery and Exchequer, in the name of the Commissioners for Reduction of the National Debt\*; of that belonging to savings' banks, and of what, from the number of names in which it stands, may be considered as held on trust for permanent investment. Such accounts were laid before Parliament in April, 1823; and similar ones, twice a-year, would be of important use in future.

As the funds are, in this country, the natural deposit of the accumulated savings of the members of the community, so the growing amount of that which is there in trust, as well as of that which stands in the names of the Accountants of the Equity Courts, may be taken as one of the scales by which to measure the rate of the increase of the wealth of the community. It would not be a certain measure indeed, but it would be one among several with which it

\* An account of this kind has been recently prepared by the Bank of England, and communicated to the public.



might be compared, which would be a guide to the estimation of the general wealth, and of its increase or diminution from time to time.

Few results are more desirable to arrive at than some valuation which could be relied on of the wealth, personal and real, of the kingdom. It will be obvious that this idea has been constantly in the view of the writer whilst drawing up these remarks. The effect of it would then be, that a comparison might be made between the amount so arrived at and the amount of the National Debt, which is indeed but a charge on the whole property of the community, including the Funds themselves, in favour of a part of the same community. It is not certain that, by any or all of the accounts here suggested, such a desirable result as an exact statement of wealth could with perfect accuracy be arrived at, but such an approximation might be obtained, by much reflection and labour, as would be of a consolatory and tranquillizing tendency.

Extended as this Paper has become, and it has been so far beyond the original design, many topics may have been omitted which, on mature reflection, and on setting to work upon the suggested plan, would naturally arise to the view, and become important in combination with those other ideas which have been here presented.

The beneficial effects to be hoped for from the adoption of some such inquiries as have been suggested, would be that they might contribute to the diffusion of accurate knowledge respecting the actual state of the nation.

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## ANALYSIS

OF THE

## STATISTICAL DOCUMENTS RESPECTING FRANCE,

PUBLISHED BY THE FRENCH MINISTER OF COMMERCE, IN THE YEAR 1835.

By T. R. PRESTON, *Assistant Secretary to the Statistical Society of London.*

THE work, of which a brief analysis is here attempted, forms, it should be premised, but the first of a much more elaborate and complete series of similar publications which are in active course of preparation, under the immediate superintendence of the French Minister of Commerce. One of the individuals to whom it is understood the arduous task of compilation and arrangement has been principally intrusted, is M. Moreau de Jonnès, the well-known author of a recent work on the Statistics of Spain\*.

A Report is prefixed to the Tables, dedicating to the King this first part of the Statistical Works, which are henceforward to appear in conformity with a Resolution of the Chambers. It is there stated that, in the Session of 1834, the funds necessary for the accomplishment of this national undertaking were voted by the Chamber, and the Minister adds, by way of apology for the collection containing comparatively so few tables (51 in number), that it was his wish and intention to have presented, at the commencement of the current year, a complete volume, but, finding that a greater length of time than was at first anticipated would be required to perform effectually a task so difficult and laborious, while the funds which had been voted were allowed only on the Budget of 1835, he considered it preferable to select for immediate publication, from the different series intended to appear, a certain number of Tables, which should serve as a sort of specimen (to use his own expression) of the entire plan, rather than defer their appearance to a later period in a more extended work; or, in other words, that it was better to make a beginning, on however small a scale, than to allow the year to elapse without producing anything; and he expresses his conviction that the interest and importance of the documents he has chosen for this special purpose will be found to compensate for their comparatively limited extent.

\* An analysis of this work by Mr. Porter is printed in the "Proceedings of the Statistical Society of London," for the Session 1834—35.



"It is not necessary for me, Sire," continues the Minister in the Report before mentioned, "to point out to your Majesty the advantages attending publications such as these. It would be altogether a superfluous task to attempt to prove at the present day the importance and utility of possessing an accurate knowledge of facts. How many questions, apparently difficult and obscure, are elucidated, or lose much of their seeming importance, when the facts are known and estimated!"

He expresses, in terms of the highest eulogium, his satisfaction at the zeal and alacrity which the whole of the Ministerial departments have manifested throughout to assist him in his labours, by contributing to enrich his collection with authentic documents; and he does not hesitate to affirm, that in no country in the world is the Government possessed of so many resources as in France for arriving at an exact appreciation of facts, an advantage which he is inclined to attribute to the peculiar system, at once simple and precise, regulating the various component branches of the Administration. Hence holding out the further expectation that, by continuing with perseverance and regularity the systematized work now begun, the Tables of the principal divisions of the public economy of the kingdom will become, in each succeeding year, more exact and more complete, he observes, that a sort of investigation will be continually going on, the authenticity of which will be entirely above suspicion, insomuch as the various results attained will have been collected independent of all *immediate application*, and with no other aim than that of truth.

At the conclusion of his Report the Minister submits to the King's approbation the outline of the plan intended to be pursued in regard to his future work, and he accompanies the sketch so given with what he not unaptly terms a General Nomenclature of the various documents which are to form part of the collection, distinguishing at the same time such of them as are already, or are on the point of being, finished, from those yet remaining to be executed. The following is a summary of the intended general order of arrangement; and from this it will be seen that the plan which it embraces, will, when complete, contain a connected mass of valuable information of the most varied and extensive nature, not probably to be surpassed, if equalled, by any collection of documents of a similar description extant.

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## GENERAL DIVISION.

### SECTION I.—*Territory, subdivided under the heads of—*

- § 1. Physical Condition of the Country.
- § 2. Administrative Division of the Country, viz.—
  - a. Former Territorial Division.
  - b. Present Territorial Division.
- § 3. Physical and Agricultural Division.



SECTION II.—*Population, subdivided under the heads of—*

- § 1. General Tables of the Population, viz.—
- a. Former Population, decennially from 1780 to 1831.
  - b. Present Population.
  - c. Population stated according to the extent of the territory in 1791 1811, and 1831.
  - d. Population stated according to the civil condition of individuals.
  - e. Population of Cities and Towns.
  - f. Population stated by Parishes (Communes).
- § 2. Movement of the Population, viz.—
- a. Births, Marriages, and Deaths, in each of the Departments.
  - b. The same in the chief Towns.
  - c. Summary of the movement of the whole Population.
  - d. Foundling Children.

SECTION III.—*Agriculture\*, subdivided under the heads of—*

- § 1. Former State of Agriculture, viz.—
- a. Cereal Grains.
  - b. Vines.
  - c. Other crops.
  - d. Cattle—Sheep and Horses.
- § 2. Present State of Agriculture, viz.—
- a. Extent of agricultural and productive territory.
  - b. Agricultural Production.
  - c. Cattle—Sheep and Horses.
- § 3. Consumption, viz.—
- a. General Consumption.
  - b. Consumption of the Towns.
- § 4. Casualties—
- Estimate of the Losses occasioned in each of the departments, by fires, inundations, and other public disasters.

SECTION IV.—*Mines, subdivided under the heads of—*

- § 1. Former State (1811, 1812).
- § 2. Present State (1814, 1833).

\* The Minister observes that this division of the Nomenclature will be, more than any other, susceptible of modification and development when the Returns furnished by the Special Commission charged with this labour have been tabulated.



SECTION V.—*Manufactures\**, subdivided under the heads of—

- § 1. Former state.
- § 2. Present state, viz.—
  - a. Mineral Substances used in Manufacture.
  - b. Vegetable      do.                      do.
  - c. Animal          do.                      do.

SECTION VI.—*Commerce*, subdivided under the heads of—

- § 1. General Tables.
- § 2. Tables of Productions, in their natural state or prepared, imported into France for manufacturing purposes; exhibiting the quantity and value of the Manufactured Produce arising therefrom, and of the Annual Exports to Foreign Countries and the Colonies, from 1787 to 1834.
- § 3. Special Tables of the Commerce of France with her Colonies and with Foreign Countries, distinguishing the Trade with each country, viz.—
  - a. Trade with each of the Powers of Europe.
  - b.    „            the Countries of Africa.
  - c.    „            „            of Asia.
  - d.    „            North and South America.
  - e.    „            the French Colonies.
- § 4. Special Tables of the Commerce of France, from 1815 to 1834, according to the nature of the merchandize, viz.—

## A.—IMPORTS.

- 1. Principal Materials necessary to Manufactures.
- 2. Principal Natural Articles of Consumption.
- 3. Principal Manufactured Articles of Consumption.

## B.—EXPORTS.

- 1. Principal Natural Productions.
- 2. Principal Manufactured Articles.

SECTION VII.—*Navigation*, subdivided under the heads of—

- § 1. State of Commercial Shipping (1826 to 1834).
- § 2. Movement of Commercial Shipping (1820 to 1834).

\* The observation respecting Agriculture applies also to Manufactures.



SECTION VIII.—*Colonies, subdivided under the heads of—*

- § 1. Former state.
- § 2. Present state.

SECTION IX.—*Internal Administration, subdivided under the heads of—*

- § 1. Departmental Expenses (1800 to 1834).
- § 2. Parochial (*Communal*) Revenues and Expenses, 1833.
- § 3. Hospitals and Asylums.
- § 4. Charitable Institutions for the relief of the Poor (*Bureaux de Bienfaisance*).
- § 5. Number of Insane Persons (1818 and 1824).
- § 6. Prisons and Galleys (1772 to 1834).
- § 7. Pawnbroking Establishments (*Monts de Piété*), 1815 to 1834.
- § 8. Sanatory Establishments, including those of Mineral Waters.
- § 9. Studs for the Breed of Horses (1827 and 1833).
- § 10. Public Works (1804 to 1834).

SECTION X.—*Finances, subdivided under the heads of—*

- § 1. Public Receipts (1801 to 1833), viz.—
  - a. Direct Taxes.
  - b. Indirect Taxes.
  - c. Other sources of Revenue.
- § 2. Public Expenses (1801 to 1833).
- § 3. Public Debt (1814 to 1834).
- § 4. Operations of the Bank of France, from its origin to 1834.
- § 5. Fluctuations of the Public Funds, from 1799 to 1835.

SECTION XI.—*Military Forces, subdivided under the heads of—*

- § 1. National Guard.
- § 2. Regular Army, viz.—
  - a. *Personnel* (1763 to 1834).
  - b. *Matériel* (1766 to 1834).

SECTION XII.—*Naval Forces, subdivided under the heads of—*

- § 1. *Personnel*.
- § 2. *Matériel*.



SECTION XIII.—*Justice, subdivided under the heads of—*

- § 1. Courts of Assize, stating the number and nature of Accusations, the sex, age, profession, &c. of the accused, &c. (1825 to 1833).
- § 2. Correctional Tribunals.
- § 3. Tribunals of Simple Police.
- § 4. Court of Appeal (Cassation).

SECTION XIV.—*Public Instruction, subdivided under the heads of—*

- § 1. Former state.
- § 2. Present state (1833), viz.—
  - a. Primary Schools.
  - b. Superior Instruction.
  - c. Special Instruction.

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Many portions of the above Nomenclature are already, it is gratifying to find, on the point of being executed to the full extent of the plan proposed; but there are others, it seems, which present graver difficulties, and require the adoption of novel methods of research. These are the branches of Statistics relating to Agriculture and to Manufacturing Establishments, where, the Minister observes, "all remains to be created;" the facts connected with these subjects never having yet been traced with any degree of certitude or accuracy, so that, to establish and authenticate them, it will be necessary to have recourse to fresh inquiries, to ensure the full success of which time must obviously be an essential element. In proportion, however, as the difficulties to be overcome are great, the means have not been wanting. A Special Commission, composed of some of the most intelligent and experienced individuals of whom the country can boast, has been appointed to examine thoroughly this grave and important question, and the Minister entertains no doubt that, by their enlightened assistance, a variety of interesting subjects, which have been hitherto wholly neglected or unexplored, will receive full investigation.

Returning to the consideration of the documents which form the more immediate subject of this analysis, it may be briefly stated that the collection begins with two Tables respecting the entire *Territory* of France, compiled from the latest registrations, and which exhibit not only the extent of the soil, but its physical and agricultural distribution.

The subject of *Population* succeeds in natural order to that of *Territory*; and five Tables show the proportions in which the one is distributed over the surface of the other. Among the new documents comprised in this section is an account of deserted and foundling children, which, the Minister observes, "serves very advantageously to replace the many inexact and



imperfect records serving heretofore as the bases of all the calculations that have been made on this most interesting subject."

Eight further Tables, devoted to *Commerce and Navigation*, exhibit the grand results of these two important branches, and present them under new and varied aspects.

The population, commerce, and cultivation of the French *Colonies*, distributed in three Tables, form the subject of another section.

With regard to the *Internal Administration*, or Home Department of the kingdom, the financial situation of the Communes (parishes), and a complete exposition of their Revenues, Expenses, and Debts, are now, for the first time, published. This document had frequently been called for in the discussions of the Chambers; to it are added similar details respecting Hospitals, Asylums, and *Bureaux de Bienfaisance* (charitable institutions for the relief of the poor),—the whole section occupying eight Tables.

By the aid of the Minister of Finance, a series of twenty-two elaborate Tables, replete with interesting details, traces for the last ten years, and in some cases even for a longer period, the movement of the public *Receipts and Expenditure*. The most important facts relative to the debts of the State are likewise exhibited, and classed with order and precision.

Lastly, the War Department has furnished its contingent in the shape of three Tables; an exposition of the state of the *Military Forces* thus terminating this abridged description of the public economy of France.

The Minister, in concluding his Report, again solicits the approbation of his Sovereign for his work, assuring him, at the same time, that there is nothing to be apprehended from thus openly submitting to the scrutiny of the world a statement of the actual condition of his dominions, insomuch as at no former period of her history was France more prosperous or more powerful; and he considers that the simple statement of facts, devoid of any comment, is the best eulogium that can be passed on his Majesty's reign, while it also serves as the best promise for the future.

The publication of these important documents, at a time when statistical science is progressing with such rapid strides, as well in our own as in other countries, whether they be considered simply and abstractedly in themselves, and on their own merits, or as the first of a far more extended series held out to expectation, cannot fail to be productive of benefit to the common cause, if only by serving as a stimulus to renewed exertion, and affording a practical illustration of what may be effected by a systematized combination of persevering skill, industrious research, and unity of purpose. Hence their appearance must be hailed with the utmost satisfaction by all who labour to promote the well-being of society, by enlightening it not only on its present and past state, but future prospects, in the furtherance of similar pursuits.

The only thing considered wanting in the original work is a condensed summary of the whole of the Tables. Should this be found supplied in the present paper, the object of the compiler will have been effectually attained. He cannot but feel, however, that some apology is due for the length of this introduction; but, independent of his wish to give, if it may be so termed, a sort of historic sketch both of the present and forthcoming work, in order to a due understanding of their details, he considered that from much of the attention of the *Statistical*



*Society of London* being directed to the formation of lists of "*Queries*," it might possibly be useful to lay before it a Summary of the General Nomenclature of Documents before cited, with the view that if any of the heads of division, or subjects of inquiry contained therein, were found deserving the consideration of those members of the Society engaged in the arduous task of collecting and arranging the necessary materials for so great and important an undertaking, they might happily prove the means of facilitating their labours, and thus contribute to a two-fold useful purpose.



1. TERRITORY - General Division

(Amounts in dollars, rounded to 1917)

Division	Number of Inhabitants	Area in square miles	Population per square mile
Alaska	100,000	588,000	170
Arizona	1,000,000	113,000	885
Arkansas	1,500,000	53,000	2830
California	5,000,000	155,000	3225
Colorado	1,000,000	104,000	962
Connecticut	1,500,000	5,500	27272
Delaware	500,000	2,400	20833
District of Columbia	200,000	37	5405
Florida	1,500,000	55,000	2727
Georgia	2,000,000	59,000	3389
Idaho	500,000	84,000	595
Illinois	4,000,000	57,000	7017
Indiana	3,000,000	36,000	8333
Iowa	2,000,000	56,000	3571
Kansas	1,500,000	82,000	1829
Kentucky	2,000,000	40,000	5000
Louisiana	1,500,000	52,000	2884
Maine	500,000	9,000	5555
Maryland	1,000,000	10,000	10000
Massachusetts	2,000,000	8,000	25000
Michigan	3,000,000	36,000	8333
Minnesota	2,000,000	22,000	9090
Mississippi	1,500,000	47,000	3191
Missouri	2,500,000	69,000	3623
Montana	500,000	147,000	340
Nebraska	1,500,000	77,000	1948
Nevada	200,000	110,000	1818
New Hampshire	500,000	9,000	5555
New Jersey	2,000,000	8,000	25000
New Mexico	500,000	121,000	4132
New York	10,000,000	47,000	21276
North Carolina	2,000,000	51,000	3921
North Dakota	500,000	71,000	7042
Ohio	3,000,000	22,000	13636
Oklahoma	1,000,000	69,000	1449
Oregon	500,000	24,000	2083
Pennsylvania	5,000,000	45,000	11111
Rhode Island	500,000	1,500	33333
South Carolina	1,000,000	16,000	6250
South Dakota	500,000	77,000	6493
Tennessee	2,000,000	42,000	4761
Texas	3,000,000	69,000	4347
Vermont	500,000	9,000	5555
Virginia	2,000,000	40,000	5000
Washington	500,000	71,000	7042
West Virginia	500,000	62,000	8064
Wisconsin	2,000,000	23,000	8695
Wyoming	500,000	97,000	5154

TABLES.

Division	Number of Inhabitants	Area in square miles	Population per square mile
Alaska	100,000	588,000	170
Arizona	1,000,000	113,000	885
Arkansas	1,500,000	53,000	2830
California	5,000,000	155,000	3225
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Florida	1,500,000	55,000	2727
Georgia	2,000,000	59,000	3389
Idaho	500,000	84,000	595
Illinois	4,000,000	57,000	7017
Indiana	3,000,000	36,000	8333
Iowa	2,000,000	56,000	3571
Kansas	1,500,000	82,000	1829
Kentucky	2,000,000	40,000	5000
Louisiana	1,500,000	52,000	2884
Maine	500,000	9,000	5555
Maryland	1,000,000	10,000	10000
Massachusetts	2,000,000	8,000	25000
Michigan	3,000,000	36,000	8333
Minnesota	2,000,000	22,000	9090
Mississippi	1,500,000	47,000	3191
Missouri	2,500,000	69,000	3623
Montana	500,000	147,000	340
Nebraska	1,500,000	77,000	1948
Nevada	200,000	110,000	1818
New Hampshire	500,000	9,000	5555
New Jersey	2,000,000	8,000	25000
New Mexico	500,000	121,000	4132
New York	10,000,000	47,000	21276
North Carolina	2,000,000	51,000	3921
North Dakota	500,000	71,000	7042
Ohio	3,000,000	22,000	13636
Oklahoma	1,000,000	69,000	1449
Oregon	500,000	24,000	2083
Pennsylvania	5,000,000	45,000	11111
Rhode Island	500,000	1,500	33333
South Carolina	1,000,000	16,000	6250
South Dakota	500,000	77,000	6493
Tennessee	2,000,000	42,000	4761
Texas	3,000,000	69,000	4347
Vermont	500,000	9,000	5555
Virginia	2,000,000	40,000	5000
Washington	500,000	71,000	7042
West Virginia	500,000	62,000	8064
Wisconsin	2,000,000	23,000	8695
Wyoming	500,000	97,000	5154



## I. TERRITORY.—GENERAL DIVISION.

(According to the "Cadastré," completed to 1834.)

POSITION.		Number of				Extent in		
		Departments.	Arrondissements.	Cantons.	Communes.	Hectares.	Square Leagues.	Thousandths.
MARITIME.	On the British Channel . . .	6	35	280	4,610	3,590,576	1,817	688
	On the Atlantic Ocean . . .	5	25	216	1,439	3,388,843	1,715	587
	On the Gulf of Gascony . . .	5	23	186	2,281	3,976,114	2,012	890
	On the Mediterranean . . .	4	14	114	870	2,275,842	1,152	122
Total Maritime		20	97	796	9,200	13,231,375	6,698	287
FRONTIER.	On Belgium . . . . .	3	13	86	1,661	1,670,736	845	790
	On Germany . . . . .	2	7	62	1,033	870 813	440	839
	On Switzerland . . . . .	2	8	59	1,214	1,022,14	517	442
	On Italy . . . . .	4	17	134	1,445	2,657,612	1,345	404
	On Spain . . . . .	3	10	85	1,432	1,526,156	772	611
Total Frontier		14	55	426	6,785	7,747,458	3,922	086
INLAND. Total Inland .		52	211	1,612	21,204	31,781,446	16,089	048
Total .		86	363	2,834	37,189(a)	52,760,279	26,709	421

## PHYSICAL AND AGRICULTURAL DIVISION, to the 1st of September 1834. (b)

		Hectares.	Ares.	Centiares.	Square Leagues.	Thou- sandths.			
Property subject to Taxation.	SUPERFICIES OF							NUMBER of BUILDINGS subject to Taxation.	
	Arable Land . . . . .	25,559,151	86	24	12,939	412			
	Meadows . . . . .	4,834,621	12	42	2,447	538			
	Vineyards . . . . .	2,134,822	11	08	1,080	753			
	Woods . . . . .	7,422,314	69	25	3,757	566			
	Orchards, Nurseries, and Gardens . . . . .	643,698	81	31	325	866			
	Osier and Willow Plots, &c. Ponds, Pools, and Canals of Irrigation . . . . .	64,489	71	12	32	640			
	Heaths, Pastures, &c. . . . .	209,431	29	16	106	024			
	Navigable Canals . . . . .	7,799,672	29	00	3,948	603			
	Various Cultures . . . . .	1,631	73	00	0	816			
	Land built upon . . . . .	951,934	25	64	481	911			
	241,842	00	29	122	427				
Total Taxable Property		49,863,609	88	51	25,243	556	Houses and other Habitations . 6,642,416		
Property not sub- ject to Taxation.	SUPERFICIES OF							Total 6,767,433	
	High and other Roads, Public Squares, Streets, &c. . . . .	1,215,115	41	47	615	162	Wind and Water Mills . . . 82,575		
	Rivers, Lakes, Brooks . . . . .	454,365	81	84	230	028	Forges and Furnaces . . . 4,412		
	Forests and unproductive Domains . . . . .	1,209,432	90	51	612	284	Manufactories, Workshops, &c. 38,030		
	Cemeteries, Churches, and Public Buildings . . . . .	17,774	50	39	8	985			
	Total Property non- taxable . . . . .	2,896,688	64	21	1,466	459			
Superficies—Grand Total		52,760,298	52	72	26,710	015	Total Number of Proprietors . 10,896,682		
							Total Number of Estates, or Divisions of Estates . } 123,360,338		

NUMBER of BUILDINGS  
subject to Taxation.

Houses and other Habitations . . . . .	6,642,416
Wind and Water Mills . . . . .	82,575
Forges and Furnaces . . . . .	4,412
Manufactories, Workshops, &c. . . . .	38,030
Total	6,767,433
Total Number of Proprietors . . . . .	10,896,682
Total Number of Estates, or Divisions of Estates . . . . .	123,360,338

(a) In the original the total is thus stated:—37,187.

(b) This Table has been framed according to the registration of lands, effected to the 1st of September 1834, and the proportions which they furnish for what remained to be enregistered.



## II.—POPULATION.—DIVISION BY CLASSES.

(According to the Census of 1831.)

Population, 1831.	
Total.	Per Sq. League.
3,968,746	2,183
2,573,935	1,500
2,039,729	1,013
1,184,418	1,028
9,766,828	1,458
1,022,213	1,208
964,471	2,187
578,039	1,118
1,181,286	878
914,617	1,183
4,660,626	1,188
18,141,769	1,127
32,569,223	1,219

Males :		Number.	Total.
	{ Children and Bachelors . . . . .	8,866,422	
	{ Married . . . . .	6,047,841	
	{ Widowers . . . . .	722,611	
	{ Military . . . . .	303,231	
Total Males . . . . .			15,940,105
Females :	{ Children and Spinsters . . . . .	9,069,923	
	{ Married . . . . .	6,056,836	
	{ Widows . . . . .	1,502,359	
Total Females . . . . .			16,629,118
General Total . . . . .			32,569,223

There is but little variation in the proportion of males to females in the different departments, the preponderance of females in the greater part of the whole 86 departments being nearly in the same ratio as is shown in the above Table ; while, in the few departments (17) where there is an excess of males, the excess is very inconsiderable.

BIRTHS.							
Years.	In the whole Country (inclusive of the Department of the Seine).			In the Department of the Seine alone.			
	Legitimate.	Illegitimate.	Foundlings.	Legitimate.	Illegitimate.	Foundlings.	
1824	912,978	71,174	33,600	23,063	10,713	5,425	
1825	904,594	69,392	32,241	23,868	10,606	5,456	
1826	920,720	72,471	32,850	24,538	11,147	5,585	
1827	909,428	70,768	32,385	24,496	11,013	5,609	
1828	905,843	70,704	33,627	24,299	11,148	5,671	
1829	895,176	69,351	32,997	23,534	10,615	5,487	
1830	898,577	69,247	33,264	23,788	10,711	5,341	
1831	915,298	71,411	35,701	24,391	11,044	5,803	
1832	870,509	67,677	35,283	21,845	9,885	5,139	
Total . . . . .	8,133,123	632,195	301,948	213,822	96,882	49,516	
Annual Average . . . . .	903,680	70,244	33,549	23,758	10,765	5,502	
				Whole Country.		Department of the Seine.	
Proportion of illegitimate to legitimate births . . . . .				1 to 13		1 to 2.20	
Proportion of foundlings to the whole number of births . . . . .				1 to 30		1 to 7.27	

1824 to 1832.



II. POPULATION (*continued*).—FOUNDINGS. (*a*)

TABLE of the Average Number of FOUNDINGS, and of the Total and Average EXPENSES incurred for their MAINTENANCE, from 1824 to 1833, both inclusive.

	Years.	Average Number of Foundlings in the Year.	Whole Expense.		Average Expense for each Child.	
			fr.	c.	fr.	c.
	1824	116,767	9,800,212	11	83	93
	1825	117,305	9,796,780	91	83	51
	1826	116,377	9,662,066	13	83	02
	1827	114,384	9,485,661	03	82	92
	1828	114,307	9,445,575	45	82	63
	1829	115,472	9,458,896	34	81	91
	1830	118,073	9,590,411	78	81	22
	1831	123,869	10,036,946	05	81	02
	1832	127,982	10,258,800	67	80	15
	1833	127,507	10,240,262	53	80	31
Total for the 10 Years .		1,192,043	97,775,613	00	.	.
Annual Average .		119,204	9,777,561	30	82	03

TABLE of the Movement of deserted FOUNDINGS, of the EXPENSES they have occasioned, and of the RESOURCES from which the same have been supplied, during a Decennial Period, from 1824 to 1833.

ADMITTED.			DISCHARGED.						
Number of Foundlings existing in the Hospitals, and Houses dependent on them, at the commencement of the first year, 1824			116,452	Children arrived at the age when they cease to be chargeable to the Hospitals			78,590		
Admitted.	Males	141,354	336,297	Taken away by their parents or by benefactors			46,025		
	Females	137,138		Died	in the Hospitals	46,755	198,505		
	Sex not specified	57,805			at nurse	151,750			
Total			452,749	Remaining at the end of the last year, 1833			129,629		
Total			452,749	Total			452,749		
EXPENSES.			RESOURCES.						
			fr.	c.				fr.	c.
Maintenance and keep of the Children			88,132,712	09	Sums voted in the <i>Special</i> or <i>Facultative</i> Budget			59,795,432	15
All other expenses			9,642,900	91	Produce of Fines and Confiscations			2,080,157	52
Total			fr. 97,775,613	00	Contingents assigned to the Hospitals			11,559,478	26
Average annual expense of each child			fr. 82	00	Sums left to be provided by the Communes			21,409,782	26
					Various other resources			1,933,507	81
					Total			fr. 96,778,358	00

N. B. The above Tables are for the whole 86 Departments.

(*a*) Much valuable information on this important subject will be found in M. Quetelet's recent work, "*Sur l'Homme*."



## III. COMMERCE—SPECIAL AND GENERAL.

TABLE of the COMMERCE of FRANCE from 1815 to 1833.

GENERAL COMMERCE. *		SPECIAL COMMERCE.				
(As per next Table.)						
TOTAL IMPORTS.	TOTAL EXPORTS.	Years.	IMPORTS. (a)		EXPORTS. (b)	
			Entered for Home Consumption.		Of French Produce & Manufactures.	
Francs.	Francs.		Value.	Amount of Duty.	Value.	Amount of Duty.
			fr.	fr.	fr.	fr.
		1815	199,467,661	35,869,889	422,147,776	3,765,720
		1816	242,698,753	44,013,380	547,706,317	4,401,718
		1817	332,374,523	55,385,400	464,049,389	3,227,100
		1818	335,574,488	60,122,644	502,284,083	4,253,634
		1819	294,548,286	56,606,825	460,232,224	4,215,740
		1820	335,009,566	70,307,970	543,112,774	3,759,371
		1821	355,591,857	69,869,085	450,788,843	2,675,086
		1822	368,990,533	78,271,010	427,679,156	2,111,320
		1823	317,362,862	70,372,005	427,184,857	1,762,433
		1824	401,018,127	92,355,730	505,836,512	1,668,192
533,622,392	667,294,114	1825	400,579,530	86,993,594	543,881,169	1,683,521
564,728,610	560,508,769	1826	436,116,472	99,674,165	461,027,171	1,420,108
565,804,228	602,401,276	1827	414,137,001	93,591,369	506,823,737	1,545,437
607,677,321	609,922,632	1828	453,760,337	103,868,702	511,215,922	1,434,749
616,353,397	607,818,646	1829	483,353,139	99,633,473	504,247,629	1,394,613
638,338,433	572,664,064	1830	489,242,685	97,691,221	452,901,341	1,329,494
512,825,551	618,169,911	1831	374,188,539	91,823,481	455,574,481	1,180,793
652,872,341	696,282,132	1832	505,093,488	100,897,988	507,414,974	1,431,477
693,275,752	766,316,312	1833	491,137,471	101,636,816	559,425,054	1,256,379
5,385,498,025	5,701,377,856	Totals	7,230,245,318	1,508,984,747	9,253,533,409	44,516,885
		Annual Average }	380,539,227	79,420,250	487,028,074	2,342,994

\* TABLE of MERCHANDISE IMPORTED and EXPORTED from 1825 to 1833, both inclusive.  
(Exclusive of Specie and Bullion.)

GENERAL COMMERCE.	IMPORTS.			EXPORTS.		
	No. of Vessels.	Tonnage of Vessels.	Value of Goods in Francs.	No. of Vessels.	Tonnage of Vessels.	Value of Goods in Francs.
By French Vessels . .	31,152	3,147,745	2,161,121,876	31,522	2,950,719	2,000,259,859
Foreign ditto . .	43,251	5,011,105	1,474,868,623	43,771	3,812,932	2,074,074,652
Land . . . .	. .	. .	1,749,507,526	. .	. .	1,627,043,345
Total for 9 Years .	74,403	8,158,850	5,385,498,025	75,293	6,763,651	5,701,377,856
Annual Average .	8,267	906,559	598,388,669	8,366	751,517	633,486,428

(a) The original Tables exhibit the distinction of raw materials necessary to manufactures, and articles for consumption in their natural state and manufactured.

(b) Divided in the original into natural produce, and objects of home manufacture.



III. GENERAL COMMERCE (*continued*). 1825 to 1833.

DIVISION BY COUNTRIES.	TOTAL IMPORTS.		TOTAL EXPORTS.	
	Total.	Annual Average.	Total.	Annual Average.
COUNTRIES IN EUROPE.				
	francs.	francs.	francs.	francs.
Great Britain . . . . .	275,173,185	30,574,798	922,227,951	102,469,772
Holland and Belgium, 1825 to 1830 . . . . .	486,793,053	81,132,175	319,677,393	53,279,565
Holland, 1831 to 1833 . . . . .	19,726,955	6,575,651	59,475,356	19,825,119
Belgium, 1831 to 1833 . . . . .	180,426,166	60,142,055	129,529,989	43,176,663
Sweden and Norway . . . . .	115,606,853	12,845,206	26,341,860	2,926,873
Denmark . . . . .	10,186,688	1,120,743	16,730,121	1,858,902
Russia . . . . .	197,683,198	21,964,799	80,500,370	8,944,485
Hanse Towns . . . . .	80,373,206	8,930,356	124,650,036	13,850,004
Austria . . . . .	288,787,068	32,087,452	47,726,049	5,302,894
Prussia . . . . .	168,478,158	18,719,795	72,326,946	8,036,327
Germany . . . . .	255,708,880	28,412,098	345,638,335	38,404,259
Switzerland . . . . .	187,743,620	20,860,402	385,126,601	42,791,844
Sardinian States . . . . .	580,970,420	64,562,269	377,894,849	41,877,205
Tuscan and Roman States . . . . .	89,827,648	9,980,849	85,370,700	9,485,633
Naples and Sicily . . . . .	130,460,459	14,495,606	81,309,275	9,034,364
Spain . . . . .	271,487,281	30,165,253	487,592,103	54,176,900
Portugal . . . . .	12,372,719	1,374,746	20,922,380	2,324,709
Greece and Turkey, 1825 to 1830 . . . . .	103,293,545	17,215,590	59,725,430	9,954,238
Greece, 1831 to 1833 . . . . .	2,165,444	721,813	3,980,106	1,326,702
Turkey, 1831 to 1833 . . . . .	45,084,768	15,028,256	42,021,872	14,007,290
Total—European States . . Fr.	3,502,349,314	389,149,924	3,688,767,722	409,863,080
COUNTRIES OUT OF EUROPE.				
Egypt . . . . .	47,501,963	5,277,996	34,274,769	2,808,307
Coast of Africa, 1825 to 1830, including Algiers . . . . .	24,795,376	4,132,562	30,463,885	5,077,314
Do. do. 1831 to 1833 . . . . .	17,070,210	5,690,070	10,997,302	3,665,767
Algiers, 1831 to 1833 . . . . .	5,634,144	1,878,048	39,839,108	13,279,702
Dutch, English, Danish, and Spanish West India Islands . . . . .	76,045,884	8,449,542	107,843,567	11,982,618
Haiti, or St. Domingo . . . . .	47,266,580	5,251,842	52,392,945	5,821,436
United States of America . . . . .	659,390,578	73,265,619	808,131,416	89,792,279
Brazils . . . . .	93,676,875	10,408,541	105,303,723	11,700,413
Mexico, Buenos Ayres, Colombia, Chili, and Peru . . . . .	114,310,098	12,701,122	274,406,535	30,489,615
Mauritius . . . . .	11,429,027	1,269,892	19,834,408	2,203,823
China and Cochin China . . . . .	12,410,045	1,378,893	9,802,890	1,089,210
East India . . . . .	148,229,928	16,469,992	47,971,811	5,330,201
French Colonies and French India Salvages, &c. . . . .	623,032,738	69,225,859	471,347,775	52,371,975
	2,355,265	261,696		
Total—States out of Europe Fr.	1,883,148,711	209,238,745	2,012,610,134	223,623,348
Total—European and other States (as at p. 39) . . . Fr.	5,385,498,025	598,388,669	5,701,377,856	633,486,428



## IV. NAVIGATION.

VESSELS that have entered and cleared from the Ports of FRANCE, from 1820 to 1833 (both inclusive).

	Entered.			Cleared.		
	Vessels.	Tonnage.	Crews.	Vessels.	Tonnage.	Crews.
<b>TRADE WITH FOREIGN PARTS.</b>						
French Vessels trading with the French Colonies	5,737	1,376,560	80,625	6,172	1,485,600	88,311
Ditto with Foreign States . . . .	41,866	3,254,539	296,972	43,408	2,896,723	302,261
Total French Vessels . . . . .	47,603	4,631,099	377,597	49,580	4,382,323	390,572
Foreign Vessels . . . . .	64,554	7,017,964	. .	73,717	5,746,820	. .
Total French and Foreign Vessels . . . . .	112,157	11,649,063	. .	123,297	10,129,143	. .
Annual Average . . . . .	8,011	832,076	. .	8,807	723,510	. .
Fisheries . . . . .	79,016	1,354,197	546,095	87,311	1,440,648	611,654
Coasting Trade . . . . .	901,579	27,990,924	3,527,609	857,607	26,324,621	3,310,914
Total . . . . .	980,595	29,345,121	4,073,704	944,918	27,765,269	3,922,568
French Trade with Foreign Parts, as above . . . . .	47,603	4,631,099	377,597	49,580	4,382,323	390,572
Total French Navigation . . . . .	1,028,198	33,976,220	4,451,301	994,498	32,147,592	4,313,140
Annual Average . . . . .	73,442	2,426,585	317,950	71,035	2,296,256	308,081

TONNAGE of the Commercial Shipping belonging to the Ports of FRANCE, in each Year, from 1826 to 1833.

Years.	No. of Vessels.	Increase.	Decrease.	Tonnage.	Increase.	Decrease.	
1826	14,530	. .	. .	694,170	. .	. .	
1827	14,322	. .	208	692,125	. .	2,045	
1828	14,447	125	. .	693,381	1,256	. .	
1829	14,742	295	. .	692,856	. .	525	
1830	14,787	45	. .	687,436	. .	5,420	
1831	15,031	244	. .	684,127	. .	3,309	
1832	15,224	193	. .	669,381	. .	14,746	
1833	15,025	. .	199	647,107	. .	22,274	
	118,108	902	407	5,460,583	1,256	48,319	
	. . .	407	. .	. .	. .	1,256	
Actual Increase	. . .	495	. .	. .	. .	47,063	Actual Decrease.
Annual Average	14,763	62	. .	682,573	. .	5,883	



NAVIGATION (*continued*).

TABLES of the effective State of the COMMERCIAL SHIPPING of FRANCE, 1827 to 1833.

	Ships.	Tonnage.	Deductions.	Ships.	Tonnage.
Situation on the 1st January 1827 .	14,497	689,448			
Plus New Constructions: viz.					
Years. Ships. Tonnage.			Extinctions {		
1827 740 49,912			By Breaking up . . . .	2,847	93,327
1828 785 40,424			Shipwrecks . . . .	1,325	107,334
1829 910 35,208			Sales Abroad . . . .	165	24,873
1830 726 33,265			Prizes and Confiscations .	85	7,162
1831 696 19,868	5,209	225,224	Minus from Change of Port of Registry	1,646	142,394
1832 672 14,870					
1833 680 31,677					
Plus from Change of Port of Registry .	1,387	107,525		6,068	375,090
Total Deductions .	21,093	1,022,197			
	6,068	375,090			
Situation 31st December 1833 . . .	15,025	647,107			

Years.	Gross Totals.		Extinctions, &c.		Situation, 31st December of each Year.	
	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.
Annual Totals. {						
1827	15,449	755,269	1,127	63,144	14,322	692,125
1828	15,362	748,858	915	55,477	14,447	693,381
1829	15,540	743,285	798	50,429	14,742	692,856
1830	15,632	742,030	780	52,442	14,852	689,588
1831	15,715	719,650	684	35,523	15,031	684,127
1832	15,908	715,695	684	46,314	15,224	669,381
1833	16,105	718,868	1,080	71,761	15,025	647,107

## DIVISION by CLASSES of VESSELS.

Vessels.	1827.		1833.	
	Ships.	Tonnage.	Ships.	Tonnage.
Of, and above 800 tons . .	3	2,849	1	1,000
From 700 to 800 " . .	6	4,380	2	1,442
" 600 — 700 " . .	2	1,266	1	625
" 500 — 600 " . .	13	6,955	11	5,915
" 400 — 500 " . .	38	16,644	44	18,935
" 300 — 400 " . .	183	62,223	187	63,902
" 200 — 300 " . .	570	137,940	539	132,055
" 100 — 200 " . .	1,357	196,765	1,200	176,403
" 60 — 100 " . .	1,565	123,635	1,485	118,502
" 30 — 60 " . .	1,110	49,950	1,037	46,025
Of, and under 30 " . .	9,475	89,518	10,518	82,303



## V. COLONIES.

## Free and Slave Population of the French Colonies in 1831.

	FREE POPULATION.			SLAVE POPULATION.			Total Free and Slave Population.
	Males.	Females.	Total.	Males.	Females.	Total.	
DIVISION BY COLONIES.							
Martinique . . . . .	11,399	12,018	23,417	41,825	54,474	96,299	119,716
Guadaloupe . . . . .	10,555	11,769	22,324	47,259	50,080	97,339	119,663
French Guiana . . . . .	1,873	1,887	3,760	10,213	8,889	19,102	22,862
Bourbon . . . . .	14,059	13,586	27,645	46,802	23,483	70,285	97,930
Senegal . . . . .	1,331	1,666	2,997	5,397	6,012	11,409	14,406
Total . . . . .	39,217	40,926	80,143	151,496	142,938	294,434	374,577
DIVISION BY AGES.							
Under 14 years of age . . . . .	12,380	11,987	24,367	37,421	36,081	73,502	97,869
From 14 to 60 do. . . . .	25,151	26,811	51,962	107,078	98,059	205,137	257,099
Above 60 do. . . . .	1,686	2,128	3,814	6,997	8,798	15,795	19,609
Total . . . . .	39,217	40,926	80,143	151,496	142,938	294,434	374,577

## French Establishments in India in 1828.

Settlements.	Europeans and Descendants of Europeans.	Topas. (a)	Indians.	Total.
Pondicherry . . . . .	776	582	75,087	76,445
Chandernagor . . . . .	283	519	35,093	35,895
Karikal . . . . .	111	42	33,306	33,459
Mahé . . . . .	29	136	2,937	3,102
Yanaon . . . . .	. . .	. . .	. . .	4,000
<b>Total . . . . .</b>	<b>. . .</b>	<b>. . .</b>	<b>. . .</b>	<b>152,901</b>

## Number of Agricultural and Manufacturing Establishments existing in the French Colonies in 1831.

Colonies.	Sugar Plantations.	Coffee Plantations.	Cotton Plantations.	Cocoa Plantations.	Roucou, or Annotto Plantations.	Spice Plantations.	Alimentary Vegetable Plantations.	Total Plantations in each Colony.
Martinique . . . . .	463	1,455	96	. . .	. . .	. . .	1,014	3,028
Guadaloupe . . . . .	583	556	133	2	. . .	. . .	239	1,513
French Guiana . . . . .	60	26	103	6	101	42	279	617
Bourbon . . . . .	212	432	. . .	. . .	. . .	90	1,960	2,694
<b>Total . . . . .</b>	<b>1,318</b>	<b>2,469</b>	<b>332</b>	<b>8</b>	<b>101</b>	<b>132</b>	<b>3,492</b>	<b>7,852</b>

(a) The Topas (which means literally hat-wearers) are individuals of a mixed race, springing from Europeans and natives, or Indians who have renounced their caste.



V. COLONIES (*continued*).

General Tables of the Commerce of the French Colonies, from 1822 to 1832.

	Years.	IMPORTS.	EXPORTS.	COLONIES.
		francs.	francs.	
Annual Totals.	1822	30,745,696	41,690,797	Martinique, Guadeloupe, and Bourbon.
	1823	35,600,777	46,678,771	
	1824	41,768,460	56,083,845	
	1825	44,423,234	58,635,645	
	1826	60,374,451	68,782,854	
	1827	62,081,611	67,334,351	Martinique, Guadeloupe, Bourbon, French Guiana, and Senegal.
	1828	59,806,662	70,261,625	
	1829	64,051,979	67,125,398	
	1830	48,090,589	58,611,271	
	1831	36,111,098	45,495,518	
	1832	47,092,116	49,142,734	
Total . . Fr.		530,146,673	629,842,809	
Annual Average Fr.		48,195,152	57,258,437	

DIVISION BY COLONIES.		IMPORTS.		EXPORTS.	
		Total Value.	Annual Average.	Total Value.	Annual Average.
1822 to 1832	Martinique . . .	fr. 194,398,336	fr. 17,672,576	fr. 218,880,839	fr. 19,898,258
1822 to 1832	Guadeloupe . . .	175,214,936	15,928,630	226,385,990	20,580,636
1822 to 1831	French Guiana . .	20,508,387	2,050,838	20,599,029	2,059,902
1822 to 1832	Bourbon . . .	105,825,026	9,620,457	138,825,889	12,620,535
1822 to 1831	Senegal . . .	34,199,988	3,419,998	25,151,062	2,515,106
Total (as above) . . Fr.		530,146,673	. . .	629,842,809	. . .



## VI. INTERNAL ADMINISTRATION.

## Departmental Expenses—1823 to 1832 (inclusive).

Nature of the Expenses.	Total for the Ten Years.	Annual Average.
<b>FIXED EXPENSES.</b>		
	fr.	fr.
Salaries of the <i>Préfets</i> . . . . .	19,248,854	1,924,885
„ „ <i>Secrétaires-Généraux</i> . . . . .	2,693,016	269,301
„ „ <i>Sous-Préfets</i> . . . . .	8,312,505	831,250
„ „ <i>Conseillers de Préfecture</i> . . . . .	4,496,211	449,621
Expenses of Administration of the <i>Préfectures</i> . . . . .	28,972,147	2,897,214
„ „ „ <i>Sous-Préfectures</i> . . . . .	11,617,034	1,161,703
Expenses, ordinary and extraordinary, of the Central Houses of De- tention (a) . . . . .	35,100,216	3,510,021
Buildings and Repairs done to the Royal Courts, Sanatory Establish- ments, &c. . . . .	2,204,771	220,477
Total—Fixed Expenses . . . . . Fr.	112,644,754	11,264,475
<b>VARIABLE ORDINARY EXPENSES.</b>		
Taxes, Rent, and Furniture of the <i>Préfectures</i> . . . . .	2,427,615	242,761
Departmental Prisons . . . . .	38,916,025	3,891,602
Depôts of Mendicity and Buildings appropriated to Charity . . . . .	14,182,911	1,418,291
Barracks of the <i>Gendarmerie</i> . . . . .	10,819,003	1,081,900
Courts and Tribunals . . . . .	10,161,961	1,016,196
Departmental Edifices . . . . .	27,347,714	2,734,771
Royal Roads, Departmental and Communal Highways . . . . .	60,433,127	6,043,312
Foundling Children . . . . .	53,519,937	535,199
Premiums of Encouragement and Charitable Contributions . . . . .	14,316,439	1,431,643
Departmental Debts . . . . .	5,482,988	548,298
Various and incidental Items . . . . .	17,616,436	1,761,643
Total—Variable Ordinary Expenses . . . . . Fr.	255,224,156	25,522,415
<b>SPECIAL OR <i>Facultative</i> EXPENSES.</b>		
Departmental Edifices . . . . .	20,716,964	2,071,696
Royal Roads, Departmental and Communal Highways . . . . .	63,630,421	6,363,042
Supplement for the Expenses of Foundling Children . . . . .	5,935,451	593,545
Contributions to the Communes and buildings appropriated to Charity . . . . .	4,241,105	424,110
Diocesan Clergy . . . . .	11,039,791	1,103,979
Various Items . . . . .	9,755,471	975,547
Total—Special or <i>Facultative</i> Expenses, Ordinary and Extraordinary . . . . . } Fr.	115,319,183	11,531,918
Total—Fixed, Ordinary, and Special or <i>Facultative</i> Expenses Fr.	483,188,093	48,318,809

(a) In 1833 the Central Houses of Detention contained 16,338 prisoners.



VI. INTERNAL ADMINISTRATION (*continued*).

## Departmental Expenses—1823 to 1832 (inclusive).

Years.	Fixed Expenses.	Variable Ordinary Expenses.	Special Expenses, Ordinary and Extraordinary.	Total Annual Expenses.
	francs.	francs.	francs.	francs.
DIVISION BY YEARS. { 1823	11,043,761	22,745,353	8,201,438	41,990,552
1824	11,195,172	25,951,441	8,564,851	45,711,464
1825	11,281,519	24,557,825	9,188,455	45,027,799
1826	11,381,356	25,614,889	9,617,248	46,613,493
1827	11,552,199	25,040,948	10,581,919	47,175,066
1828	11,581,944	25,692,154	11,757,660	49,031,758
1829	11,568,285	25,620,887	12,820,886	50,010,058
1830	11,321,102	25,354,115	13,331,111	50,006,328
1831	10,910,521	26,116,289	13,820,565	50,847,375
1832	10,808,895	28,530,255	17,435,050	56,774,200
Total, 10 Years	Fr.112,644,754	255,224,156	115,319,183	483,188,093

## FINANCIAL SITUATION of the COMMUNES (Parishes), and of the Towns, Chief Places of Departments, in 1833.

REVENUE, Ordinary and Extraordinary.		Communes.		Towns.	
		fr.	c.	fr.	c.
RECEIPTS.	Ordinary additional " <i>centimes</i> " . . . . .	9,331,147	41	1,070,445	95
	Allowances on Trade-patents . . . . .	1,640,364	59	388,194	13
	Extraordinary Imposts . . . . .	13,451,094	44	1,286,655	39
	Produce of the Octroi (less $\frac{1}{10}$ accruing to the Treasury) . . . . .	56,571,506	00	41,799,578	26
	Produce of real Estates . . . . .	25,828,817	67	5,704,064	90
	Produce of the letting of land . . . . .	8,292,780	17	3,413,720	18
	Produce of yearly Income from the State . . . . .	2,715,927	47	124,139	74
	" " " " from Individuals . . . . .	540,044	28	45,634	64
	Interest on Funds in the Treasury . . . . .	1,509,538	65	484,331	05
	Various produce (Gifts, Legacies, Fines, &c.) . . . . .	41,904,789	20	15,046,104	51
Total Receipts . . . . .		Fr.	161,786,009 88		69,362,868 75
EXPENDITURE, Ordinary and Extraordinary.					
EXPENDITURE.	Ordinary Expenses ( <i>Personnel</i> and <i>Matériel</i> ) . . . . .	38,751,780	64	13,111,967	74
	Maintenance and repairs of real Estates . . . . .	7,464,909	11	2,401,838	75
	Public Works . . . . .	21,686,528	78	6,591,349	34
	Municipal Police and Laystalls . . . . .	13,785,691	97	8,696,615	35
	Subscription to Charities and Foundling Children . . . . .	14,560,183	65	10,573,043	98
	National Guard . . . . .	4,511,734	07	1,806,485	91
	Public Instruction . . . . .	9,204,504	21	2,595,340	98
	Religious Worship . . . . .	5,311,558	79	1,026,129	62
	Interest on Loans . . . . .	5,560,076	50	5,199,960	83
	Purchase of Funded and real Property . . . . .	2,923,958	81	752,382	33
	Various and Incidental Expenses . . . . .	23,813,847	82	15,376,885	95
Total Expenses . . . . .		Fr.	147,574,774 35		68,132,000 78



VI. INTERNAL ADMINISTRATION (*continued*).

## COMMUNES, RECEIPTS and EXPENSES.—Average and Extreme Terms per Department.

		Department.	Amount. fr.	
Extremes.	{	Maximum of Receipts . . . {	Seine . . . . . 38,365,155	
			Marne (Upper) . . . 5,102,172	
	{	Maximum of Expenses . . . {	Seine . . . . . 38,313,338	
			Nord . . . . . 4,335,934	
	{	Minimum of Receipts . . . {	Lozère . . . . . {	168,804
		Minimum of Expenses . . . {		157,518
Average term of Receipts per Department . . .			1,881,232	
" Expenses " . . .			1,715,983	

		Communes. fr. c.	Towns. fr. c.	Population of the Towns.
Loans.	{	Sums borrowed . . . 7,768,575 46	4,076,347 10	2,772,670
	{	Sums repaid . . . 5,211,817 87	3,432,546 67	
	{	Outstanding Debt . . 80,821,875 80	76,404,525 69	

## FINANCIAL SITUATION of the HOSPITALS and ASYLUMS in the Year 1833. (a)

## REVENUE, Ordinary and Extraordinary.

	fr.	c.
Produce of Real Property, Rent in Money . . . . .	8,927,207	76
„ „ in Kind, valued in Money . . . . .	3,239,288	95
Annual Income from the State . . . . .	4,215,052	82
„ from Individuals . . . . .	1,792,833	79
Interest on Funds in the Treasury . . . . .	297,422	75
Aids and Allocations . . . . .	18,883,591	85
Donations, Legacies, &c., in Money . . . . .	983,794	26
„ „ in Kind, valued in Money . . . . .	43,041	75
Produce of the Work of Inmates of the Establishments . . . . .	630,082	85
Various and Incidental Receipts . . . . .	12,209,746	60
Total Receipts . . . . .	Fr. 51,222,063	38
Average for each Establishment . . . . .	Fr. 38,541	05

## EXPENDITURE, Ordinary and Extraordinary.

	fr.	c.
Administrative Expenses ( <i>Personnel</i> and <i>Matériel</i> ) . . . . .	31,247,545	43
Expenses relating to Foundlings . . . . .	9,355,960	87
Maintenance and Repair of Real Property . . . . .	2,479,599	74
Purchase of Funded and Real Property . . . . .	2,611,724	37
Various and Incidental Expenses . . . . .	3,147,266	67
Total Expenditure . . . . .	Fr. 48,842,097	08
Average for each Establishment . . . . .	Fr. 36,751	01

(a) The number of Hospitals and Asylums in the 86 Departments being 1,329, there are on an average 15 in each Department.



VI. INTERNAL ADMINISTRATION (*continued*).

## HOSPITALS and ASYLUMS. Average and Extreme Terms per Department.

		Department.	Amount.	
			fr.	c.
Extremes.	{	Maximum of Receipts . . .	Seine . . .	10,057,098 72
			Rhone . . .	2,380,293 00
	{	Maximum of Expenses . . .	Seine . . .	10,054,225 13
			Rhone . . .	2,325,496 00
	{	Minimum of Receipts . . .	Corsica . . .	44,355 31
		Minimum of Expenses . . .		42,380 76
Average Receipts per Department . . . . .			595,605 38	
Average Expenses, ditto . . . . .			567,931 36	
Loans.	{	Sums borrowed . . . . .	1,336,596 51	
		Sums repaid . . . . .	476,608 90	
		Outstanding Debt . . . . .	1,110,727 74	
Number of Individuals				
Remaining on the 1st of January, 1833,		154,253	Removed { by Death . . . . . 45,303	
Admitted during the Year . . . . .		425,049	{ from Cure or other causes . 381,169	
			Total left . . . . .	426,472
			Remaining 31st December, 1833 . . .	152,830
Total . . . . .		579,302	Total . . . . .	579,302

FINANCIAL SITUATION of the "BUREAUX de BIENFAISANCE" (*or Charitable Establishments for the Relief of the Poor*).

## REVENUE and EXPENSES, Ordinary and Extraordinary, during the Year 1833.

RECEIPTS.		EXPENSES.	
	fr. c.		fr. c.
Revenues peculiar to the Bureaux	6,230,138 00	Expenses of Administration . .	1,749,556 37
Collections and Donations in Money	34,891 49	Distribution of Relief, viz.	
"                    "          in Kind, {	1,386,552 28	In Food, valued in Money . . .	3,377,648 54
valued in Money . . . . .		In Clothing, Fuel, &c., ditto . .	1,258,106 09
Legacies and Inheritances . . .	583,510 25	In Money . . . . .	2,570,725 08
Various and Incidental Receipts .	2,080,654 48	Total Expenses Fr.	8,956,036 08
Total Receipts Fr.	10,315,746 50	Average for each Establishment Fr.	1,427 25
Average for each Establishment Fr.	1,643 94		

## AVERAGE and EXTREME TERMS per DEPARTMENT.

		Department.	Amount.	
			fr.	c.
Extremes.	{	Maximum of Receipts . . .	Seine . . .	2,164,496 33
			Nord . . .	1,157,138 87
	{	Maximum of Expenses . . .	Seine . . .	2,041,335 36
			Nord . . .	1,076,405 92
	{	Minimum of Receipts . . .	Creuse . . .	3,772 00
		Minimum of Expenses . . .		3,657 00
Average of Receipts per Department . . . . .			119,950 54	
Average of Expenses „ . . . . .			104,139 95	
Total Number of Establishments . . . . .			6,275	
Total Number of Individuals succoured at their own Dwellings . . . . .			695,932	



VI. INTERNAL ADMINISTRATION (*continued*).

## CHARITABLE LOAN ESTABLISHMENTS (Monts-de-Piété).

Places where established.	From and to what Years (both inclusive).	No. of Years.	Total Pledges Deposited.			Total Pledges Redeemed*.		
			Number of Articles.	Amount.	Average Value of each Article.	Number of Articles.	Amount.	Average Value of each Article.
				fr.	fr. c.		fr.	fr. c.
Paris . . .	1815 to 1833	19	21,166,840	376,372,453	17 78	21,019,823	373,759,351	17 78
Lyons . . .	1815 - 1833	19	1,405,517	24,016,073	17 08	1,366,640	23,451,320	17 15
Bordeaux . .	1812 - 1833	22	1,912,820	28,595,119	14 94	1,902,939	28,851,030	15 16
Marseille . .	1815 - 1832	18	1,134,211	21,067,705	18 57	1,136,211	21,067,705	18 54
Strasbourg . .	1828 - 1834	7	746,751	4,611,824	6 17	718,253	4,454,176	6 20
Nantes . . .	1816 - 1833	18	460,137	7,284,483	15 83	455,714	7,206,190	15 81
Rouen . . .	1818 - 1834	17	2,504,095	25,395,491	10 14	2,483,756	25,162,146	10 13
Besançon . .	1825 - 1834	10	592,443	4,876,418	8 23	573,216	4,709,380	8 21
Metz . . .	1801 - 1833	33	1,435,422	16,184,362	11 27	1,406,656	15,830,426	11 25
Dijon . . .	1822 - 1833	12	111,081	1,977,145	17 79	105,875	1,841,984	17 39
Avignon . . .	1811 - 1834	24	294,366	4,372,949	14 85	272,997	4,013,202	14 70
Nismes . . .	1829 - 1834	6	55,411	1,261,008	22 75	48,600	1,095,548	22 54
Brest . . .	1831 - 1834	3½	20,493	302,208	14 75	16,765	238,284	14 21
	Totals	. .	31,839,587	516,317,238	. .	31,507,445	511,680,742	. .
	Mean terms	16	1,989,974	32,269,827	16 22	1,969,215	31,980,046	16 24

Table showing the respective Years in which the greatest and least Number of PLEDGES were deposited and redeemed.

Places.	Pledges Deposited.				Pledges Redeemed.			
	Years.	Number of Articles.	Amount.	Average Value of each Article.	Years.	Number of Articles.	Amount.	Average Value of each Article.
			fr.	fr. c.			fr.	fr. c.
Paris . . . . .	1831	1,258,679	23,616,421	18 76	1831	1,323,287	25,361,476	19 16
	1815	853,624	16,386,254	19 20	1815	811,683	15,002,354	18 48
Lyons . . . . .	1828	104,418	1,697,340	16 26	1829	99,204	1,647,495	16 60
	1815	28,345	574,059	20 25	1815	25,608	547,302	21 37
Bordeaux . . . .	1831	112,231	1,568,965	14 00	1831	109,693	1,578,597	14 00
	1814	53,830	980,584	18 00	1814	55,273	1,037,078	19 00
Marseille . . . .	1827	70,152	1,325,900	18 90	1827	70,152	1,325,900	18 90
	1815	50,082	867,874	16 66	1815	52,082	867,874	16 66
Strasbourg . . . .	1832	136,554	739,856	5 41	1833	129,820	737,611	5 68
	1830	81,952	489,664	5 97	1828	70,389	532,755	7 56
Nantes . . . . .	1831	32,013	450,972	14 08	1831	31,248	455,722	14 58
	1816	20,189	275,921	13 66	1816	16,783	232,709	13 86
Rouen . . . . .	1822	175,883	1,753,719	9 97	1821	174,546	1,692,105	9 69
	1830	117,223	1,193,272	10 17	1828	118,990	1,204,714	10 12
Besançon . . . .	1832	69,617	520,243	7 47	1832	68,675	543,291	7 91
	1834	46,520	445,390	9 57	1825	44,488	333,340	7 49
Metz . . . . .	1827	68,803	686,233	9 97	1824	66,744	573,012	8 58
	1801	1,052	35,430	33 67	1801	275	6,780	24 65
Dijon . . . . .	1822	14,190	209,839	14 78	1831	10,447	185,007	17 70
	1826	6,804	143,547	21 09	1826	6,655	126,316	18 98
Avignon . . . . .	1831	22,348	275,343	12 32	1831	22,348	275,343	12 32
	1811	4,784	60,710	12 69	1811	4,784	60,710	12 69
Nismes . . . . .	1832	10,715	246,799	23 03	1832	10,778	243,504	22 59
	1829	3,938	92,456	23 47	1829	1,293	26,969	20 85
Brest . . . . .	1834	7,600	111,376	14 65	1834	6,828	96,465	14 12
	1831	1,628†	30,833	18 94	1831	832	12,553	15 09

\* These Totals do not in every instance agree with the Totals as given in the original Tables, but have been corrected, wherever it was found necessary, by means of the details which the Tables themselves afford.

† This was in the last eight months of 1831, viz., from the opening of the establishment on the 1st May.



## VI. INTERNAL ADMINIS

## CHARITABLE LOAN ESTA

Popu- lation according to the Census of 1831.	Places where established.	From and to what Years, (both inclusive).	PLEDGES DEPOSITED.			Pledges Redeemed.		
			Number of Articles.	Amount.	Average Value of each Article.	Number of Articles.	Amount.	Average Value of each Article.
774,338	Paris . .	1815—1833	21,166,840	fr. 376,372,453	fr. c. 17 78	16,676,361	fr. 273,571,093	fr. c. 16 40
		Annual Average	1,114,044	19,809,076	17 78	877,703	14,398,478	16 40
133,715	Lyons . .	1815—1833	1,405,517	24,016,073	17 08	1,247,635	21,245,044	17 02
		Annual Average	73,974	1,264,003	17 08	65,665	1,118,160	17 02
109,467	Bordeaux .	1812—1833	1,912,820	28,595,119	14 94	1,154,337	17,817,322	15 43
		Annual Average	86,946	1,299,778	14 94	52,470	809,878	15 43
145,115	Marseille .	1815—1832	1,134,211	21,067,705	18 57	896,969	16,711,850	18 63
		Annual Average	63,011	1,170,428	18 57	49,831	928,436	18 63
49,712	Strasburg .	1828—1834	746,751	4,611,821	6 17	682,314	4,196,410	6 15
		Annual Average	106,678	658,832	6 17	97,473	599,487	6 15
87,191	Nantes . .	1816—1833	460,137	7,284,483	15 83	289,946	4,457,624	15 37
		Annual Average	25,557	404,693	15 83	16,108	247,646	15 37
88,086	Rouen . .	1818—1834	2,504,095	25,395,491	10 14	2,417,873	24,374,899	10 08
		Annual Average	146,711	1,493,852	10 14	142,228	1,433,818	10 08
29,167	Besançon .	1825—1834	592,443	4,876,418	8 23	372,962	2,656,635	7 12
		Annual Average	59,244	487,641	8 23	37,296	265,663	7 12
44,421	Metz . .	1801—1833	1,435,422	16,184,362	11 27	1,340,390	15,129,980	11 28
		Annual Average	43,497	490,435	11 27	40,618	458,484	11 28
25,552	Dijon . .	1822—1833	111,081	1,977,145	17 79	102,781	1,763,125	17 15
		Annual Average	9,256	164,762	17 79	8,565	146,927	17 15
29,889	Avignon .	1811—1834	294,366	4,372,949	14 85	263,362	3,898,524	14 80
		Annual Average	12,265	182,206	14 85	10,973	162,438	14 80
41 266	Nismes . .	1829—1834	55,411	1,261,008	22 75	46,872	1,057,578	22 56
		Annual Average	9,235	210,168	22 75	7,812	176,263	22 56
—	Brest . .	*1831—1834	20,493	302,208	14 75	16,069	227,216	14 14
		Annual Average	5,589	82,420	14 75	4,382	61,968	14 14

At Rouen, previously to 1827, the loans were for six months, instead of twelve, the present term.

\* See note at page 48.



TRATION (*continued*).BLISHMENTS (*continued*).

REDEMPTIONS.						GENERAL TOTAL of PLEDGES REDEEMED.		
Pledges Renewed.			Pledges Forfeited and Sold.					
Number of Articles.	Amount.	Average Value of each Article.	Number of Articles.	Amount.	Average Value of each Article.	Number of Articles.	Amount.	Average Value of each Article.
	fr.	fr. c.		fr.	fr. c.		fr.	fr. c.
3,227,903	80,372,148	24 89	1,115,559	19,816,110	17 76	21,019,823	373,759,351	17 78
169,889	4,230,113	24 89	58,714	1,042,953	17 76	1,106,306	19,671,544	17 78
43,708	898,735	20 56	75,297	1,307,541	17 36	1,366,640	23,451,32	17 15
2,300	47,302	20 56	3,963	68,818	17 36	71,928	1,234,280	17 15
633,219	9,521,034	15 03	115,383	1,512,674	13 11	1,902,939	28,851,030	15 16
28,782	432,774	15 03	5,245	68,758	13 11	86,497	1,311,410	15 16
193,943	3,657,745	18 85	45,299	698,110	15 41	1,136,211	21,067,705	18 54
10,775	203,208	18 85	2,516	38,783	15 41	63,122	1,170,423	18 54
(Included in Redemptions.)			35,939	257,766	7 17	718,253	4,454,176	6 20
. . .	. . .	. . .	5,134	36,823	7 17	102,607	636,310	6 20
144,663	2,228,702	15 40	21,105	519,864	24 63	455,714	7,206,190	15 81
8,037	123,817	15 40	1,172	28,881	* 24 63	25,317	400,344	15 81
21,635	298,270	13 78	44,248	488,977	11 05	2,483,756	25,162,146	10 13
1,272	17,545	13 78	2,603	28,763	11 05	146,103	1,480,126	10 13
183,436	1,913,515	10 43	16,818	139,230	8 28	573,216	4,709,380	8 21
18,343	191,351	10 43	1,681	13,923	8 28	57,321	470,938	8 21
(Included in Redemptions.)			66,266	700,446	10 57	1,406,656	15,830,426	11 25
. . .	. . .	. . .	2,008	21,225	10 57	42,626	479,709	11 25
(Included in Redemptions.)			3,094	78,859	25 48	105,875	1,841,984	17 39
. . .	. . .	. . .	258	6,571	25 48	8,823	153,498	17 39
(Included in Redemptions.)			9,635	114,678	11 90	272,997	4,013,202	14 70
. . .	. . .	. . .	401	4,778	11 90	11,374	167,216	14 70
(Included in Redemptions.)			1,728	37,970	21 97	48,600	1,095,548	22 54
. . .	. . .	. . .	288	6,328	21 97	8,100	182,591	22 54
(Included in Redemptions.)			696	11,068	15 90	16,765	238,284	14 21
. . .	. . .	. . .	190	3,018	15 90	4,572	64,986	14 21

\* In 1820 the average value of each article was 79 f. 84 c.; but this high term is stated to have been the result of fraudulent proceedings.



VII. FINANCE—					
GENERAL					
Years.	ORDINARY				
	Direct Taxes. (Real Property Tax ; Personal and Property Tax ; Doors and Windows, &c. &c.)	Registration Dues, Stamp Duties, Revenue from Domains, &c. &c. (a).	Woods and Forests. (b)	Customs and Navigation Dues. (c)	Indirect Taxes. (d)
	fr.	fr.	fr.	fr.	fr.
1814	261,377,920	73,152,656	22,645,191	44,192,415	49,100,606
1815	361,838,576	92,097,740	15,665,260	94,463,872	123,465,149
1816	402,188,818	171,439,257	17,849,957	94,206,713	141,728,152
1817	400,817,007	179,445,250	21,637,762	108,714,073	152,540,426
1818	390,987,319	174,278,296	20,181,340	116,017,164	177,713,185
1819	369,160,721	160,369,613	18,304,811	112,263,679	187,284,206
1820	369,407,762	159,074,680	15,857,163	130,251,196	192,555,461
1821	355,245,002	164,261,109	21,806,057	128,626,963	193,807,759
1822	344,286,833	165,678,921	24,661,562	136,269,021	202,675,854
1823	343,622,286	164,857,483	23,197,641	129,258,046	196,389,818
1824	344,928,669	174,587,975	23,165,302	150,785,269	203,638,440
1825	347,294,334	177,413,510	28,215,547	146,314,155	215,295,797
1826	341,860,014	178,939,345	31,574,295	158,815,343	213,903,133
1827	323,940,758	178,777,994	26,964,719	153,044,430	209,603,725
1828	325,678,931	185,263,637	29,308,653	163,525,177	212,257,249
1829	329,435,451	186,429,355	50,321,482	159,085,086	206,136,405
1830	332,181,038	186,609,840	24,886,732	154,231,104	202,650,951
1831	367,391,053	178,497,726	16,682,885	151,806,697	162,835,279
1832	357,534,040	199,703,747	21,385,802	159,693,598	166,068,715
Total .	6,669,176,532	3,150,878,134	454,312,161	2,491,564,001	3,409,650,310
Average	351,009,291	165,835,691	23,911,166	131,134,947	179,455,279
<p>(a) Fees on Registrations, Mortgages, &amp;c. (b) Transfers, Adjudications, Domains, and accessory Produce. (c) Customs and Navigation Dues and incidental Receipts, and Receipt on the Monopoly of Salt. (d) Drinks, Produce of the Sale of Tobacco and Gunpowder, and various other Dues. (e) Post-office, Lottery, Salt-mines, and Payments made to the Treasury by the City of Paris on account of <i>Gaming Houses</i>. The receipts on account of this last item amounted in 1818 to 6,444,350 fr., and averaged annually, from 1821 to 1832, 5,500,000 fr. (f) Profit on the Coining of Money; Produce arising from the Sale of Stores, &amp;c.; Indian Produce; Produce of Fines and Confiscations; Advances by various Proprietors for the Expenses of the Registration of Lands; Produce and</p>					



## RECEIPTS—1814 to 1832.

TABLE.

RESOURCES.		ANNUAL TOTALS.		
Post-office, Lottery, Salt-mines, and Gambling Houses. (e)	Various Produce. (f)	Ordinary Resources.	Extraordinary Resources. (g)	Ordinary and Extraordinary Resources.
fr.	fr.	fr.	fr.	fr.
9,768,833	7,512,696	467,750,317	92,304,938	560,055,255
32,931,869	8,692,105	729,154,571	147,163,661	876,318,232
36,811,207	14,679,250	878,903,354	157,901,000	1,036,804,354
33,933,860	2,725,246	899,813,624	370,498,926	1,270,312,550
46,869,794	11,704,389	937,751,487	476,329,198	1,414,080,685
36,102,024	11,901,764	895,386,818	41,271,966	936,658,784
47,720,527	18,572,764	933,439,553	5,798,510	939,238,063
45,842,540	18,926,128	928,515,558	7,137,491	935,653,049
49,953,178	13,902,301	937,427,670	16,493,592	953,921,262
49,390,016	17,426,124	924,141,414	123,980,981	1,048,122,395
46,799,091	16,821,640	960,726,386	29,319,701	990,046,087
50,609,519	11,610,459	976,753,321	.	976,753,321
46,920,112	9,870,480	981,882,722	.	981,882,722
46,201,958	9,417,507	947,951,091	.	947,951,091
52,146,251	9,582,347	977,762,245	50,512,682	1,028,274,927
50,270,040	11,617,550	993,295,369	29,487,323	1,022,782,692
50,666,897	13,116,102	964,342,664	55,956,418	1,020,299,082
49,486,919	14,944,305	941,644,864	364,927,928	1,306,572,792
52,198,681	25,731,533	982,316,116	81,715,180	1,064,031,296
834,623,316	248,754,690	17,258,959,144	2,050,799,495	19,309,758,639
43,927,543	13,092,352	908,366,270	128,174,968	1,016,303,086

Local Revenues of Algiers, &c. &c. &c. (g) Proportionate Reserves on Salaries and Pensions; Abandonment by the King of part of the Civil List; Supplements to Securities (ordained in 1816); Extraordinary Taxes; Excess of Receipts over the Expenses of 1813 and previous years; Extraordinary Receipts arising from the Expedition to Algiers (58 millions); Recovery of Commercial and other Loans; Funds lodged in the Treasury by the *Caisse de Dépôts et Consignations*; Alienation of the Woods of the State; Loans, and Negotiations of 'Rentes,' &c. &c. &c.—(For the Proportion of the Extraordinary Receipts derived from Loans and Negotiations of *Rentes*, see general Table thereof, Page 74.)



VII. FINANCE—RECEIPTS.—SPECIAL TABLES of various of the Items contained in the preceding General Table of Receipts.

DIRECT TAXES—1822 to 1832.

Years.	Land Tax.	Personal and Property Tax.	Doors and Windows.	Trades and Professions.	Expense of primary Notice to the Contributaries.	Annual Totals.
	fr.	fr.	fr.	fr.	fr.	fr.
1822	254,345,634	45,805,935	21,451,068	22,366,271	317,925	344,286,833
1823	252,783,754	45,520,395	21,444,103	23,539,878	334,156	343,622,286
1824	253,174,301	45,948,824	21,297,355	23,880,334	627,855	344,928,669
1825	254,435,826	46,012,472	21,320,127	24,889,993	635,916	347,294,334
1826	249,867,283	45,140,029	20,543,171	25,671,057	638,474	341,860,014
1827	241,130,965	40,747,948	15,380,427	26,033,142	648,276	323,940,758
1828	242,120,958	41,026,951	15,446,555	26,435,569	648,898	325,678,931
1829	245,096,811	41,144,044	15,511,281	27,034,195	649,120	329,435,451
1830	246,473,888	41,272,059	15,525,002	28,256,563	653,526	332,181,038
1831	246,413,569	59,953,572	31,834,133	28,178,806	1,010,973	367,391,053
1832	248,969,602	53,049,522	27,231,049	27,599,762	684,105	357,534,040
Totals . .	2,734,812,591	505,621,751	226,984,271	283,885,570	6,849,224	3,758,153,407
Yearly Average } .	248,619,326	45,965,614	20,534,934	25,807,779	622,656	341,650,309

REGISTRATION, STAMPS.

Years.	Fees of Registration, Mortgages, &c.	Stamp Duties.	Revenue and Proceeds of the Sale of Domains.	Domains and Woods exchanged or mortgaged.
	fr. c.	fr. c.	fr. c.	fr. c.
1821	133,914,664 30	26,302,843 47	3,754,606 15	288,995 50
1822	132,676,977 67	26,793,732 11	5,410,145 24	798,066 65
1823	133,713,454 70	26,909,089 61	4,146,371 35	88,567 23
1824	144,090,721 19	26,977,941 16	3,390,419 17	128,892 67
1825	146,447,136 33	27,558,516 85	3,158,102 24	249,755 11
1826	148,519,965 63	27,875,605 71	2,133,865 02	409,909 34
1827	148,720,561 77	27,773,016 97	2,011,078 59	273,336 16
1828	153,563,663 94	28,995,610 77	1,649,432 61	1,054,929 00
1829	155,497,983 11	28,787,760 05	1,710,364 31	433,248 08
1830	153,457,297 07	27,959,925 49	2,932,076 66	2,260,540 99
1831	146,174,873 10	28,196,551 73	3,620,884 07	505,417 13
1832	163,655,574 06	28,929,497 01	3,502,714 77	3,615,960 71
Totals . . .	1,760,432,872 87	333,060,090 93	37,420,060 18	10,107,618 57
Yearly Average	146,702,739 22	27,755,007 58	3,118,338 35	842,301 55



VII. FINANCE—RECEIPTS.—SPECIAL TABLES (*continued*).

## POST-OFFICE—1821 to 1832.

Years.	Produce of the Postage on Inland Letters.	Duty of 5 per Cent. on Articles of Silver.	Produce of Places in the Mail Coaches.	Produce of Places in the Packets be- tween Calais and Dover.	Produce of the Transmission of Foreign Letters.	Extraordinary Receipts.	Annual Totals.
	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
1821	21,107,013 10	455,386 31	1,588,981 00	69,781 70	502,294 17	169,242 38	23,892,698 66
1822	21,911,867 82	497,239 94	1,435,245 17	66,722 90	510,991 21	106,235 84	24,528,302 88
1823	22,780,634 14	605,985 68	1,470,020 09	31,498 25	458,675 72	17,532 07	25,364,345 95
1824	23,703,028 80	586,795 20	1,561,280 66	34,110 60	526,744 13	75,081 24	26,487,040 63
1825	24,724,718 14	561,723 56	1,627,086 04	53,364 25	571,959 94	13,789 07	27,552,641 00
1826	24,762,067 10	634,282 77	1,564,121 58	61,757 35	571,448 64	32,560 24	27,626,237 68
1827	24,755,863 08	562,538 82	1,585,553 31	66,420 25	547,262 41	23,267 46	27,540,905 33
1828	27,211,700 94	621,288 84	2,119,538 21	48,069 25	525,683 68	19,338 61	30,545,619 53
1829	27,125,907 97	655,508 56	2,279,374 16	41,090 25	640,092 32	12,582 45	30,754,555 71
1830	30,134,805 65	659,876 09	2,272,666 92	29,839 35	610,620 24	19,841 43	33,727,649 68
1831	30,073,630 93	900,896 54	1,781,345 68	. .	566,403 24	18,043 40	33,340,319 79
1832	31,110,030 10	914,115 49	1,562,238 91	. .	564,679 96	13,540 05	34,164,604 51
Totals .	309,401,267 77	7,655,637 80	20,847,451 73	502,654 15	6,596,855 66	521,054 24	345,524,921 35
Yearly Average	25,783,438 98	637,969 82	1,737,287 64	50,265 41	549,737 97	43,421 18	28,793,743 44

## DOMAINS, &amp;c. &amp;c.—1821 to 1832.

Felling of Wood. (Decime per Franc, and ac- cessory Produce.)	Various Produce. (Price of the Sale of various Stores.)	Produce of Fines of Simple and Correctional Police, assigned to Charitable Purposes.	Produce of proportionate Reserves on Salaries.	Annual Totals.
fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
4,179,791 45	. . .	601,565 00	204,672 31	169,247,138 18
4,485,030 69	. . .	813,094 00	. . .	170,977,046 36
4,263,536 76	1,000,649 38	792,036 21	. . .	170,913,705 24
4,506,269 20	3,470,538 70	2,046,956 37	. . .	184,611,738 46
5,525,065 93	3,899,065 28	1,388,075 54	. . .	188,225,717 28
5,628,710 68	2,348,135 86	1,356,960 00	. . .	188,273,152 24
5,188,929 19	2,543,579 55	1,263,072 65	. . .	187,773,574 88
5,239,553 21	2,443,158 81	1,020,637 63	. . .	193,966,985 97
5,999,046 45	1,456,854 43	957,607 43	. . .	194,842,863 86
3,376,612 91	2,176,059 46	708,698 75	. . .	192,871,211 33
2,274,566 83	1,256,019 28	526,922 96	297,849 51	182,853,084 61
3,151,567 73	1,624,486 86	899,938 91	184,286 79	205,564,026 84
53,818,681 03	22,218,547 61	12,375,565 45	686,808 61	2,230,120,245 25
4,484,890 08	2,221,854 76	1,031,297 12	228,936 20	185,843,353 55



VII. FINANCE—RECEIPTS.—SPECIAL TABLES (*continued*).

## CUSTOMS, &amp;c.—1821 to 1832.

Years.	Customs' Duties.	Navigation Dues.	Accessory Receipts.	Salt Monopoly.	Annual Totals.	Produce of Confiscations and Fines.
	fr.	fr.	fr.	fr.	fr.	fr.
1821	72,585,036	2,292,713	1,212,679	52,536,535	128,626,963	1,634,890
1822	80,457,860	2,339,696	1,191,310	52,280,155	136,269,021	1,941,506
1823	72,053,430	2,410,320	1,327,023	53,467,273	129,258,046	1,427,843
1824	94,026,614	2,407,950	1,587,947	52,762,758	150,785,269	1,412,985
1825	88,677,115	2,335,455	1,351,152	53,950,433	146,314,155	1,917,611
1826	101,094,273	3,072,898	955,218	53,692,954	158,815,343	1,960,724
1827	95,136,806	2,753,598	778,214	54,375,812	153,044,430	1,669,858
1828	105,612,041	2,971,883	698,233	54,243,020	163,525,177	1,780,882
1829	101,028,086	3,236,146	656,336	54,164,518	159,085,086	1,505,795
1830	98,993,074	3,291,136	629,811	51,317,083	154,231,104	1,588,247
1831	93,003,120	2,313,307	613,571	55,876,699	151,806,697	1,146,102
1832	102,319,465	2,932,777	583,410	53,857,946	159,693,598	1,492,633
Totals .	1,104,986,920	32,357,879	11,584,904	642,525,186	1,791,454,889	19,479,076
Yearly Average	92,082,243	2,696,490	965,409	53,543,765	149,287,907	1,623,256

## PRODUCE of the

From and to what Period.	Gross Receipts in Sums staked.	Distributed in Prizes.	Gross Amount of Profits.
	fr. c.	fr. c.	fr. c.
1798 to 1832 (both inclusive) . .	1,913,775,011 41	1,383,664,973 76	530,110,037 65
Annual Average for 35 years . .	54,679,286 04	39,533,284 96	15,146,001 08

## MISCELLANEOUS SOURCES

Nature of the Sources.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Produce of various minor branches of Public Revenues . . . . .	1,142,945	1,169,320	1,072,890	458,660	2,004,514
Repayments from Government Departments—Sale of Old Stores, &c. . . . .	416,979	2,217,477	6,809,853	3,493,981	1,570,000
Various incidental Receipts . . . . .	1,426,408	2,925,008	1,956,233	1,600,277	1,077,096
Annual Totals . . . . .	2,986,332	6,311,805	9,838,976	5,552,918	4,651,610



VII. FINANCE—RECEIPTS.—SPECIAL TABLES (*continued*).

## INDIRECT TAXES—1821 to 1832.

Years.	Duties that remained to be recovered at the end of the year preceding.	Liquids for Drink.	Various Minor Dues.	Recoveries of Advances.	Produce of the Sale of Tobacco and Snuff.	Produce of the Sale of Gunpowder.	Annual Totals.	Produce of Fines.
	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1821	1,950,356	95,581,016	27,490,278	658,940	64,929,123	3,198,046	193,807,759	862,138
1822	1,790,908	102,850,796	28,474,765	884,431	65,021,569	3,653,385	202,675,854	965,616
1823	1,843,424	97,565,360	28,701,932	873,754	63,902,831	3,02,517	196,389,818	961,967
1824	1,815,582	100,309,886	31,012,526	903,388	66,143,041	3,454,017	203,638,440	1,015,005
1825	3,054,288	107,371,525	32,641,883	979,728	67,329,419	3,918,954	215,295,797	962,956
1826	.	109,173,367	32,605,178	1,045,096	67,035,430	4,044,062	213,903,133	794,782
1827	.	105,381,100	32,185,437	1,048,356	66,740,895	4,247,937	209,603,725	1,169,439
1828	.	106,619,384	32,453,013	1,098,193	67,989,487	4,097,172	212,257,249	941,635
1829	.	101,338,387	32,494,080	999,144	66,605,471	4,649,303	206,136,405	832,973
1830	.	98,459,467	31,716,008	1,027,980	67,267,497	4,179,999	202,650,951	560,037
1831	.	63,441,611	28,907,978	885,103	66,087,347	3,513,240	162,835,279	262,151
1832	.	65,008,652	29,214,764	930,845	67,488,167	3,426,287	166,068,715	477,037
Totals .	.	1,153,150,551	367,897,842	11,334,958	796,540,277	45,884,939	2,385,263,125	9,805,736
Yearly Average	.	96,095,879	30,658,153	944,580	66,378,356	3,823,745	193,771,927	817,144

PUBLIC LOTTERY (*a*).

Administrative Expenses.			Net Profit accruing to the Treasury.	Loss in the year 1814. ( <i>b</i> ).	Proportions in comparison with Gross Receipts.		
Allowances.	Charges of Collection.	Total.			Prizes.	Gross Profits.	Net Profits.
fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	f. c.	f. c.	f. c.
107,466,802 47	57,939,512 37	165,406,314 84	365,080,420 16	376,697 35	71 70	28 29	19 65
3,070,480 07	1,655,414 64	4,725,894 71	364,703,722 81 10,420,106 37		71 70	28 29	19 65

## of REVENUE—1822 to 1832.

1827.	1828.	1829.	1830.	1831.	1832.	Totals. 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1,814,879	2,454,239	2,248,238	3,969,474	4,059,561	8,005,948	28,400,668	2,581,879
1,608,830	2,016,806	1,968,377	2,280,257	2,278,099	3,654,339	28,314,998	2,574,090
1,021,237	361,762	266,210	270,730	305,027	267,579	11,477,567	1,043,415
4,444,946	4,832,807	4,482,825	6,520,461	6,642,687	11,927,866	68,193,233	6,199,384

(*a*) This has lately been suppressed.(*b*) This loss is stated to be attributable to the extraordinary circumstances induced by the invasion.



## VII. FINANCE—EXPENSES.—

Years.	ORDINARY						
	Civil List, and Royal Family.	Public Debt, Life Annuities, and Pensions.	Sinking, or Redemption Fund.	Interest on Sums lodged as Securities.	Chamber of Peers and Deputies.	Order of the Legion of Honour.	Justice.
1814	fr. 19,510,000	fr. 95,987,101	fr. . . .	fr. 6,000,000	fr. 6,571,472	fr. . . .	fr. 17,935,786
1815	30,700,000	98,492,916	. . .	8,000,000	3,776,840	. . .	18,981,005
1816	34,000,000	118,135,198	20,000,000	8,000,000	2,700,000	. . .	17,585,601
1817	34,000,000	176,876,001	40,000,000	9,000,000	2,680,000	. . .	18,278,872
1818	34,000,000	177,591,305	40,000,000	8,000,000	2,680,000	. . .	18,058,806
1819	34,000,000	213,682,729	40,000,000	8,000,000	2,680,000	. . .	18,165,026
1820	34,000,000	214,163,437	40,000,000	8,146,942	2,792,680	1,740,000	18,706,537
1821	34,000,000	213,067,835	40,000,000	9,856,680	2,800,000	3,454,000	18,555,289
Totals . .	254,210,000	1,307,996,522	220,000,000	65,003,622	26,680,992	5,194,000	146,266,922
Yearly Average } .	31,776,250	163,499,585	36,666,666	8,125,452	3,335,124	2,597,000	18,282,265

## EXPENSES—1822 to 1832.—

	Years.	Ministry of Justice.		Ministry of Foreign Affairs.	Ministry of Public Instruction.	Ministry of Commerce.
		Budget of Justice.	Budget of Religion.			
		fr.	fr.	fr.	fr.	fr.
	1822	18,665,776	26,015,504	9,862,900	3,295,578	9,264,649
	1823	19,113,234	26,677,792	9,109,952	3,235,636	6,843,921
	1824	19,437,697	27,678,356	9,247,812	3,354,396	7,332,120
	1825	19,442,024	28,844,801	9,792,030	3,311,508	9,629,594
	1826	19,299,014	30,584,521	10,688,923	3,405,775	9,585,750
	1827	19,724,495	32,638,740	8,989,117	3,361,535	9,611,851
	1828	19,543,951	33,501,632	13,878,006	3,396,732	10,171,993
	1829	19,584,316	35,471,166	11,747,809	3,411,174	10,490,206
	1830	19,266,743	36,513,573	8,942,372	3,521,473	11,722,862
	1831	19,556,915	34,624,789	8,626,332	3,943,134	10,781,589
	1832	18,915,760	33,815,191	7,165,430	4,191,528	11,781,705
Totals . .		212,549,925	346,366,065	108,050,683	38,428,469	107,216,240
Yearly Average } .		19,322,720	31,487,824	9,822,789	3,493,497	9,746,931

(a) Expenses of management and collecting Taxes ; local expenses of the Parishes and Departments ; repayments under various heads.



## 1814 to 1821.—GENERAL TABLE.

## EXPENSES.

Foreign Affairs.	Interior, Religion, Commerce, and Police.	War.	Marine.	Finance.	Various (a).	Extraordinary Expenses (b).	Annual Totals, Ordinary and Extraordinary Expenses.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
7,651,986	71,040,957	252,783,824	47,558,415	22,054,046	.	25,200,000	572,293,587
9,654,112	54,550,298	328,244,628	39,592,690	26,193,361	133,255,554	180,000,000	931,441,404
11,620,000	66,261,808	218,265,311	47,962,210	38,193,825	163,726,659	309,403,416	1,055,854,028
9,311,304	77,450,411	179,593,499	43,995,699	55,996,444	154,072,387	387,999,011	1,189,253,628
9,798,830	106,045,377	151,524,754	44,669,494	119,818,778	152,697,100	568,862,222	1,433,746,666
7,926,670	103,236,212	179,804,076	44,365,675	74,076,583	164,063,057	6,000,000	896,000,028
9,021,166	106,375,251	178,578,947	49,414,965	77,172,972	164,727,259	1,889,507	906,729,663
8,828,186	109,583,226	173,785,532	52,025,483	78,176,093	164,212,021	.	908,344,345
73,812,254	694,543,540	1,662,580,571	369,584,631	491,682,102	1,096,754,037	1,479,354,156	7,893,663,349
9,226,521	86,817,942	207,122,581	46,198,079	61,460,262	156,679,148	211,336,308	986,707,918

## GENERAL TABLE BY MINISTRIES.

Ministry of the Interior, and Public Works.	Ministry of War.	Ministry of Marine and Colonies.	Ministry of Finance.	Annual Totals for the whole of the Ministries.
fr.	fr.	fr.	fr.	fr.
81,971,356	192,411,518	59,945,428	547,742,273	949,174,982
82,312,388	343,582,486	73,980,596	553,169,157	1,118,025,162
85,820,988	218,180,741	63,725,937	551,295,795	986,073,842
84,968,042	204,028,790	61,934,148	560,021,672	981,972,609
85,493,439	209,075,731	58,749,242	550,066,524	976,948,919
93,488,585	210,057,982	62,650,438	546,012,022	986,534,765
89,177,548	224,232,162	80,538,539	549,660,074	1,024,100,637
92,705,268	214,576,426	72,934,663	553,993,404	1,014,914,432
101,603,812	233,822,741	90,367,075	589,381,464	1,095,142,115
108,718,905	386,624,854	71,362,272	570,372,185	1,214,610,975
125,384,929	339,144,378	64,157,233	570,064,603	1,174,620,757
1,031,645,260	2,775,737,809	760,345,571	6,141,779,173	11,522,119,195
93,785,933	252,339,801	69,122,325	558,343,561	1,047,465,381

(b) In this column are included various payments to the Allies, amounting in all to 890,000,000 fr., and for the Army of Occupation to 474,638,119 fr.



## VII. FINANCE—EXPENSES.—

## MINISTRY OF JUSTICE—

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	631,582	582,150	586,992	596,973	596,934
Salaries of the Ministers of State . . . . .	183,817	168,467	176,133	152,133	151,000
Council of State . . . . .	731,207	690,850	687,244	698,483	695,083
Court of Appeal (Cassation) . . . . .	957,160	980,765	979,329	991,467	991,296
Royal Courts . . . . .	4,337,285	4,351,324	4,356,501	4,355,508	4,396,490
Courts of Assize . . . . .	221,975	220,350	220,475	221,850	217,550
Tribunals of First Resort (Première Instance) . . . . .	4,921,021	5,379,611	5,508,534	5,516,850	5,519,175
Tribunals of Commerce . . . . .	172,983	172,778	174,195	174,297	174,266
Tribunals of Police . . . . .	62,361	62,361	62,376	62,366	62,398
Justices of the Peace (Justice de Paix) . . . . .	3,061,285	3,060,290	3,065,782	3,078,751	3,082,487
Judicial Expenses in Criminal, Correctional, and Police Cases . . . . .	3,354,713	3,408,128	3,585,865	3,563,852	3,383,068
Pensions to Judges . . . . .	.	.	.	.	.
Various Expenses . . . . .	30,387	36,160	34,271	29,494	29,267
Annual Totals . . . . .	18,665,776	19,113,234	19,437,697	19,442,024	19,299,014

## MINISTRY OF JUSTICE—

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	28,876	28,686	216,449	1,028,792	379,983
Salaries of the Cardinals, Archbishops, and Bishops . . . . .	966,051	1,156,082	1,395,199	1,439,316	1,484,861
Ditto Members of Chapters and Parochial Clergy . . . . .	19,781,065	20,056,729	20,555,576	20,898,000	21,505,575
Expenses of the Royal Chapter of St. Denis . . . . .	200,000	188,008	199,589	200,000	199,950
Allowances to Schools . . . . .	924,919	915,798	923,275	925,073	1,160,714
Moiety of Expenses of Secondary Ecclesiastical Instruction . . . . .	.	.	.	.	.
Assistance to Ecclesiastics and aged Nuns . . . . .	994,743	914,144	931,293	983,300	1,103,417
Assistance to the Communes for the repair and building of Churches . . . . .	479,104	446,349	459,402	436,689	1,062,861
Purchase, &c., of Diocesan Edifices . . . . .	1,076,567	1,051,130	1,151,036	1,033,196	1,553,377
Ordinary Diocesan Expenses . . . . .	835,246	1,028,995	1,165,239	1,191,144	1,391,200
Various Incidental Expenses . . . . .	154,438	322,448	107,842	134,041	158,421
Protestant Worship . . . . .	574,495	569,423	573,456	575,250	584,162
Jewish Worship . . . . .	.	.	.	.	.
Annual Totals . . . . .	26,015,504	26,677,792	27,678,356	28,844,801	30,584,521



## SPECIAL TABLES, 1822 to 1832.

## BUDGET OF JUSTICE.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
596,748	638,237	591,845	573,516	554,809	530,510	6,480,296	589,118
155,000	164,000	91,000	50,572	.	.	1,292,122	143,569
693,489	668,430	551,436	485,590	483,794	447,297	6,832,903	621,173
997,188	982,880	993,255	1,001,692	968,639	842,000	10,685,671	971,425
4,389,388	4,403,113	4,412,762	4,386,931	4,353,527	4,139,417	47,882,246	4,352,931
221,700	220,200	221,700	217,650	218,975	172,030	2,374,455	215,859
5,519,656	5,525,743	5,528,147	5,486,318	5,520,190	5,518,373	59,943,618	5,449,420
174,297	174,261	174,392	176,516	176,647	176,536	1,921,168	174,652
62,398	62,398	62,398	62,262	61,947	62,370	685,635	62,330
3,081,906	3,083,668	3,089,620	3,061,505	3,071,930	3,085,915	33,823,139	3,074,831
3,308,436	3,396,178	3,384,131	3,317,591	3,445,769	3,678,604	37,824,335	3,438,576
.	150,000	398,000	371,600	639,300	226,000	1,784,900	356,980
524,289	74,843	85,630	75,000	63,388	36,708	1,019,437	92,676
19,724,495	19,543,951	19,584,316	19,266,743	19,556,915	18,915,760	212,549,925	19,322,720

## BUDGET OF RELIGION.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
339,812	449,239	434,694	325,279	253,565	235,774	3,721,149	338,286
1,505,441	1,506,144	1,492,359	1,387,309	1,216,844	945,456	14,495,062	1,317,732
23,223,267	23,918,371	24,437,722	25,811,668	26,216,556	26,540,291	252,944,820	22,994,983
199,882	199,999	198,861	177,370	155,337	107,447	2,026,443	184,222
1,159,980	1,171,841	1,190,200	1,183,311	1,152,472	1,005,428	11,713,011	1,064,819
.	.	1,195,865	1,179,851	.	.	2,375,716	1,187,858
1,115,859	1,116,340	1,116,938	1,194,000	1,163,911	1,078,283	11,712,228	1,064,748
1,080,277	1,077,027	1,238,448	1,207,942	793,443	859,887	9,141,429	831,039
1,753,418	1,849,581	1,882,578	1,812,413	1,822,933	1,155,546	16,141,775	1,467,434
1,425,759	1,447,708	1,431,179	1,409,199	997,377	981,946	13,304,992	1,209,544
156,705	91,747	162,120	105,490	39,893	92,360	1,525,505	138,682
678,340	673,635	690,202	719,741	749,650	747,892	7,136,246	648,749
.	.	.	.	62,808	64,881	127,689	63,844
32,638,740	33,501,632	35,471,166	36,513,573	34,624,789	33,815,191	346,366,065	31,487,824



## VII. FINANCE—EXPENSES.—

## MINISTRY OF

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	757,603	764,424	884,449	953,286	1,088,731
Salaries of Political and Consular Agents . . . . .	4,091,464	4,086,542	4,287,355	4,312,787	4,909,019
Expenses of Establishments of ditto . . . . .	337,333	306,056	216,870	338,333	194,910
Expenses of Journeys and Couriers . . . . .	444,497	548,973	510,809	498,792	585,209
Office Expenses . . . . .	1,171,000	1,001,770	1,105,922	1,321,521	1,103,215
Diplomatic Presents . . . . .	222,213	127,616	267,949	192,803	205,181
Indemnities and Aids . . . . .	211,800	275,538	292,003	365,419	311,141
Secret Expenses . . . . .	700,000	700,000	700,000	700,000	700,000
Extraordinary Missions and unforeseen Ex- penses . . . . .	912,167	878,733	381,020	467,733	612,517
Total Annual Ordinary Expenses . . . . .	8,847,577	8,689,652	8,646,377	9,150,674	9,709,923
„ „ Extraordinary „ . . . . .	1,015,323	420,300	601,435	641,356	979,000
„ „ Ordinary and Extraordinary Expenses . . . . .	9,862,900	9,109,952	9,247,812	9,792,030	10,688,923

## MINISTRY OF

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	25,000	25,000	25,000	25,000	25,000
Royal Colleges . . . . .	1,770,260	1,696,185	1,767,545	1,701,776	1,774,082
Primary Instruction . . . . .			46,700	49,395	67,393
Scientific and Literary Establishments . . . . .	1,333,318	1,347,451	1,348,151	1,368,337	1,372,300
Premiums of Encouragement and Subscrip- tions . . . . .	167,000	167,000	167,000	167,000	167,000
Annual Totals . . . . .	3,295,578	3,235,636	3,354,396	3,311,508	3,405,775

## MINISTRY OF

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	348,000	348,000	348,000	473,000	473,000
Establishments and Premiums for the Breed of Horses . . . . .	1,739,197	1,693,395	1,750,700	1,769,684	1,759,532
Encouragement of Agriculture . . . . .	160,192	109,717	91,520	95,857	87,257
Veterinary Schools . . . . .	248,719	209,683	182,709	218,494	217,393
Commerce, Manufactures, &c. . . . .	511,577	479,801	452,881	438,217	402,757
Weights and Measures . . . . .					583,323
Maritime Fisheries . . . . .	2,549,595	1,231,228	1,233,264	2,413,321	2,761,108
Sanatory Establishments . . . . .	929,476	745,113	906,954	505,712	493,276
Succours to the Colonists of St. Domingo, and for Losses by Storms, Fire, &c. . . . .	2,777,893	2,026,984	2,366,092	3,715,309	2,808,104
Various Incidental Expenses . . . . .					
Annual Totals . . . . .	9,264,649	6,843,921	7,332,120	9,629,594	9,585,750



## SPECIAL TABLES (continued).

## FOREIGN AFFAIRS.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
965,123	900,086	877,969	838,893	734,371	688,046	9,452,981	859,361
4,816,012	4,835,023	4,855,070	4,271,316	3,997,475	3,864,442	48,326,505	4,393,318
220,967	344,022	358,149	459,111	468,667	282,175	3,526,593	320,599
545,847	776,480	698,206	657,252	899,792	789,842	6,955,699	632,336
1,075,996	958,219	1,053,597	999,580	898,938	696,999	11,386,757	1,035,159
259,648	150,852	128,867	84,029	149,939	49,288	1,838,385	167,125
118,175	76,135	70,920	45,354	77,612	60,717	1,904,314	173,119
700,000	700,000	400,000	700,000	700,000	650,000	7,350,000	668,181
287,349	258,137	256,650	386,837	199,538	83,921	4,724,602	429,509
8,989,117	8,998,954	8,699,428	8,442,372	8,126,332	7,165,430	95,465,836	8,678,712
.	4,879,052	3,048,381	500,000	500,000	.	12,584,847	1,398,316
8,989,117	13,878,006	11,747,809	8,942,372	8,626,332	7,165,430	108,050,683	9,822,789

## PUBLIC INSTRUCTION.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
25,000	25,000	25,000	25,000	25,000	25,000	275,000	25,000
1,741,091	1,765,586	1,725,000	1,674,831	1,663,825	1,587,942	18,868,123	1,715,283
43,894	49,840	99,372	258,847	677,312	981,538	2,274,291	252,699
1,384,550	1,389,306	1,394,802	1,395,795	1,409,997	1,408,070	15,152,077	1,377,461
167,000	167,000	167,000	167,000	167,000	188,978	1,858,978	168,998
3,361,535	3,396,732	3,411,174	3,521,473	3,943,134	4,191,528	38,428,469	3,493,497

## COMMERCE.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
473,000	579,683	337,995	464,360	448,000	434,666	4,727,704	429,791
1,836,483	1,810,204	1,781,166	1,843,145	1,733,562	1,649,773	19,366,841	1,760,621
46,354	44,120	63,493	52,764	54,872	64,763	870,909	79,164
176,204	248,079	234,211	237,828	253,122	245,441	2,471,883	224,716
405,094	438,506	409,763	434,025	379,909	379,279	4,731,809	430,164
715,734	660,721	686,234	693,006	719,694	716,307	4,775,019	682,145
2,402,329	3,047,389	3,786,811	4,976,525	3,745,924	3,566,109	31,713,603	2,883,054
463,202	502,912	369,407	220,834	215,814	205,491	5,558,191	505,290
3,093,451	2,840,379	2,821,126	2,800,375	2,927,840	2,875,331	31,052,884	2,822,989
.	.	.	.	302,852	1,644,545	1,947,397	973,698
9,611,851	10,171,993	10,490,206	11,722,862	10,781,589	11,781,705	107,216,240	9,746,931



## VII. FINANCE—EXPENSES.—

## MINISTRY OF THE INTERIOR

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	1,276,190	1,268,411	1,117,795	1,033,445	974,340
Secret Expenses . . . . .	2,200,000	2,200,000	1,711,769	2,000,000	2,000,000
Telegraphic Lines . . . . .	788,033	702,880	611,330	679,993	649,941
Succours to Refugee Foreigners. . . . .	197,928	581,708	.	.	.
Bridges, Highways, and Mines . . . . .	30,191,406	30,918,669	30,836,616	31,101,570	30,620,257
Aids and Succours to Benevolent Establish- ments . . . . .	1,106,568	1,016,811	962,025	968,233	961,693
Public Works of general interest . . . . .	4,171,966	3,739,775	3,316,485	3,443,467	3,170,274
Theatres, Fine Arts, Public Establish- ments, &c. . . . .	2,340,158	2,328,205	2,003,463	2,038,654	1,908,206
Various Incidental Expenses . . . . .	190,347	145,154	140,412	178,724	31,600
Departmental Expenses . . . . .	39,508,760	39,410,775	45,121,093	43,523,956	45,177,128
Annual Totals . . . . .	81,971,356	82,312,388	85,820,986	84,968,042	85,493,439

## MINISTRY OF MARINE

Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	981,569	959,204	949,874	944,023	999,815
Pay to Land and Sea Service, and other corresponding Expenses . . . . .	14,574,243	17,327,948	18,490,442	17,890,910	21,089,760
Hospitals . . . . .	874,753	1,234,584	819,108	901,987	1,066,209
Provisions . . . . .	7,331,609	8,876,226	8,048,349	7,750,462	6,933,924
Building, Fitting, and Equipping . . . . .	26,289,077	34,026,897	26,256,631	25,154,955	24,140,141
Artillery . . . . .	518,584	1,222,169	1,176,412	1,145,342	1,281,711
Hydraulic Works and Buildings for Civil Departments . . . . .	2,951,061	2,551,048	2,356,566	2,383,965	2,295,084
Conveyance by Sea . . . . .	.	.	.	.	.
Equipment of Vessels for the Expedition of the Army of Algiers, &c. . . . .	.	.	.	.	.
Crews of Gallies (Chiourmes) . . . . .	204,278	283,985	241,498	225,074	195,618
Various Incidental Expenses (including Works at Havre and Cherbourg in 1827) }	563,615	609,739	601,980	572,896	712,950
Colonies . . . . .	5,656,639	6,888,796	4,759,888	4,863,310	.
Arrears . . . . .	.	.	25,189	101,224	34,030
Annual Totals . . . . .	59,945,428	73,980,596	63,725,937	61,934,148	58,749,242



## SPECIAL TABLES—(continued).

## AND PUBLIC WORKS.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
994,200	1,389,465	951,330	1,151,451	1,147,468	1,142,170	12,446,265	1,131,478
1,944,068	1,879,703	1,694,379	1,998,666	2,969,647	4,000,000	24,598,232	2,236,202
687,021	699,789	699,990	671,520	696,868	736,175	7,623,540	693,049
.	.	320,497	324,725	1,873,559	4,243,439	7,541,856	1,256,976
31,228,729	31,377,092	34,791,341	37,811,254	40,472,959	48,515,932	377,865,825	34,351,438
966,627	967,995	958,801	979,060	934,968	906,709	10,729,490	975,408
3,163,968	2,987,951	3,534,603	5,450,760	3,544,530	7,408,304	43,932,083	3,993,825
1,920,765	2,150,262	1,958,354	1,976,439	2,074,280	1,904,149	22,602,935	2,054,812
6,820,886	.	.	2,657,080	5,097,481	2,069,999	17,331,683	1,925,742
45,762,321	47,725,291	47,795,973	48,582,857	49,907,145	54,458,052	506,973,351	46,088,486
93,488,585	89,177,548	92,705,268	101,603,812	108,718,905	125,384,929	1,031,645,260	93,785,933

## AND COLONIES.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
900,719	933,995	851,357	860,788	729,079	678,300	9,788,723	889,883
21,234,703	25,248,357	26,815,375	26,744,157	23,372,776	20,098,567	232,887,238	21,171,567
1,047,517	1,107,698	1,242,123	1,305,906	1,094,127	952,865	11,646,877	1,058,807
7,968,018	11,151,659	10,639,015	9,255,975	8,170,080	6,762,579	92,887,896	8,444,354
25,255,686	35,342,924	27,170,500	28,161,022	23,578,865	21,600,201	296,976,899	26,997,899
1,633,032	2,015,122	1,520,176	3,407,339	2,751,616	2,246,768	18,918,271	1,719,842
3,102,171	3,650,163	3,725,267	4,287,036	3,972,427	3,527,929	34,802,717	3,163,883
.	.	.	334,265	290,228	144,412	768,905	256,301
.	.	.	7,119,433	.	.	7,119,433	7,119,433
244,676	264,021	227,870	316,452	293,687	281,469	2,778,628	252,602
1,224,344	824,600	742,980	1,072,075	711,646	610,356	8,247,181	749,743
.	.	.	7,502,627	6,397,741	7,253,787	43,322,788	6,188,969
39,572	.	.	.	.	.	200,015	50,004
62,650,438	80,538,539	72,934,663	90,367,075	71,362,272	64,157,233	760,345,571	69,122,325



VII. FINANCE—EXPENSES.—					
MINISTRY					
Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Central Administration . . . . .	1,691,362	1,764,258	1,857,505	1,841,024	1,801,837
Depôt of War, and Topography of France . . . . .	220,559	209,693	277,975	279,904	279,180
Staff . . . . .	18,267,527	23,475,231	21,256,501	19,429,635	19,738,918
Military Household of the King . . . . .	1,680,000	1,991,589	3,341,649	3,589,342	3,414,716
Gendarmerie . . . . .	16,056,199	16,745,362	16,522,140	16,426,369	17,203,620
Recruiting Service . . . . .	826,118	988,152	976,116	1,129,238	973,725
Full Pay, and Allowances . . . . .	71,600,300	87,224,063	73,889,593	71,178,573	72,041,761
Military Provisions and Firing . . . . .	24,908,054	98,023,361	41,375,212	32,313,010	34,715,953
Clothing, Tents, and Harnessing . . . . .	13,924,267	29,864,532	12,513,112	12,913,456	13,471,720
Military Bedding . . . . .	3,216,130	3,419,399	3,472,595	3,282,073	3,606,558
Hospitals . . . . .	6,570,886	12,280,937	9,664,856	7,724,593	8,191,850
Marching and Conveyance Service . . . . .	4,250,665	19,332,497	5,694,391	3,959,970	3,519,858
Military Justice . . . . .	265,708	264,490	207,729	204,284	247,522
Cavalry Horses . . . . .	3,752,347	12,878,520	1,611,424	1,858,841	1,925,143
<i>Matériel</i> of the Artillery . . . . .	7,368,815	12,069,252	8,664,384	8,006,005	8,000,464
<i>Matériel</i> of the Engineers . . . . .	7,585,044	7,961,150	8,271,717	8,479,403	9,225,116
Military Schools . . . . .	1,737,437	1,587,053	1,535,702	1,596,852	1,519,562
Order of St. Louis, and of Military Merit . . . . .	. . .	. . .	. . .	39,524	500,000
Provisional Expenses (Half-pay, &c.). . . . .	8,490,100	6,881,115	6,491,600	6,483,586	6,135,185
Invalids of War . . . . .	. . .	. . .	. . .	. . .	. . .
Various, Incidental, and Secret Expenses . . . . .	. . .	6,621,832	485,584	326,647	560,695
Arrears anterior to 1816 . . . . .	. . .	. . .	70,956	2,966,461	2,002,348
Purchase of Ground, and Construction of New Buildings. . . . .	. . .	. . .	. . .	. . .	. . .
Annual Totals . . . . .	192,411,518	343,582,486	218,180,741	204,028,790	209,075,731



SPECIAL TABLES (*continued*).

## OF WAR.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1,759,296	1,718,527	1,605,878	1,570,844	1,913,987	1,873,378	19,397,896	1,763,445
291,954	288,785	291,135	301,174	198,965	192,535	2,831,859	257,441
19,320,510	18,925,357	17,692,951	17,993,542	18,850,412	18,094,412	213,044,996	19,367,726
3,200,000	3,140,000	3,140,000	2,049,722	.	.	25,547,018	2,838,557
17,234,466	16,758,086	16,435,826	16,086,197	19,294,609	18,346,620	187,109,494	17,009,954
820,828	932,452	1,005,741	856,117	484,364	426,375	9,419,226	856,293
73,034,348	79,851,679	78,256,977	85,403,496	123,812,394	117,858,179	934,151,383	84,922,853
33,340,197	35,601,089	38,181,033	43,141,598	66,437,404	69,829,710	517,866,621	47,078,783
12,561,929	17,689,832	13,464,390	13,147,054	25,723,352	17,060,690	182,334,334	16,575,848
4,615,099	3,862,819	4,564,569	4,629,025	7,529,680	7,998,498	50,196,445	4,563,313
8,596,017	9,563,218	9,547,893	9,663,028	14,250,014	14,379,286	110,432,578	10,039,325
3,711,322	4,962,624	4,238,094	9,451,354	12,416,426	8,295,678	79,832,879	7,257,534
238,314	280,475	276,120	209,383	305,971	325,218	2,825,214	256,837
1,970,359	4,260,239	1,845,286	2,168,455	8,768,638	3,036,421	44,075,673	4,006,879
7,868,314	8,485,079	7,769,459	10,985,949	52,200,383	30,263,120	161,681,224	14,698,293
9,555,280	9,740,179	8,620,882	8,978,126	20,847,869	16,086,196	115,350,962	10,486,451
1,480,880	1,327,319	1,277,948	1,189,275	1,631,599	1,843,890	16,727,517	1,520,683
540,000	540,000	600,000	581,363	362,083	.	3,162,970	451,853
5,672,441	5,486,864	4,941,753	4,425,959	8,276,462	7,008,497	70,293,562	6,390,323
.	.	.	.	1,500,000	3,044,942	4,544,942	2,272,471
260,377	266,008	234,367	682,245	1,099,392	1,631,763	12,168,910	1,216,891
814,696	551,511	586,124	308,835	720,850	1,548,970	9,570,751	1,063,417
3,171,355	.	.	.	.	.	3,171,355	3,171,355
210,057,982	224,232,162	214,576,426	233,822,741	386,624,854	339,144,378	2,775,737,809	252,339,801



VII. FINANCE—EXPENSES.—					
MINISTRY OF					
Chief Heads of Expenditure.	1822.	1823.	1824.	1825.	1826.
	fr.	fr.	fr.	fr.	fr.
Public Debt, including Sinking-Fund . . . . .	331,641,073	326,247,836	334,665,689	328,710,257	327,108,789
Endowments . . . . .	40,224,000	40,241,967	40,334,488	44,375,892	38,416,170
Central Administration, and Audit Office } (Cour des Comptes) . . . . .	5,949,611	5,410,536	5,085,383	5,882,805	5,903,593
Mint Expenses . . . . .	4,061,015	2,037,969	4,492,488	7,781,335	6,563,567
Salaries and Expenses of the Treasury . . . . .	11,435,738	12,912,271	11,221,318	10,612,072	10,412,317
Expense of collecting Direct Taxes . . . . .	16,499,786	16,451,232	14,455,589	14,431,017	14,276,332
Registration, Stamps, and Domains . . . . .	11,382,638	11,459,141	11,390,918	11,108,715	10,955,926
Woods and Forests . . . . .	3,145,687	3,260,735	3,294,490	3,256,068	3,462,651
Customs . . . . .	24,073,321	23,925,312	23,669,162	23,456,327	23,349,208
Indirect Taxes . . . . .	48,184,647	47,442,042	46,756,393	48,496,040	48,149,775
Post Office . . . . .	12,087,068	14,626,291	13,239,280	12,876,110	12,548,305
Lottery . . . . .	4,629,912	4,419,432	4,520,482	4,639,856	4,183,154
Repayments and Deficiencies on Direct } Taxes . . . . .	23,031,431	22,644,124	23,741,552	24,798,833	24,363,991
Repayments, and Sums unduly levied on } various and Indirect Taxes . . . . .	2,665,386	3,051,945	3,716,613	3,884,933	3,628,482
Restitutions of Fines and Confisca- } tions . . . . .	7,462,734	5,806,119	9,205,905	13,620,578	14,015,805
Discounts on Customs, and Salt Duties . . . . .	1,153,815	1,354,474	1,412,599	1,472,378	1,467,298
Various Incidental Expenses . . . . .	114,411	11,877,731	93,446	618,456	1,261,161
Annual Totals . . . . .	547,742,273	553,169,157	551,295,795	560,021,672	550,066,524



SPECIAL TABLES (*continued*).

## FINANCE.

1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1822 to 1832.	Annual Average.
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
322,402,147	325,106,980	328,885,029	332,602,482	347,919,597	353,652,489	3,658,942,368	332,631,124
38,412,051	38,345,331	38,252,158	32,721,877	22,717,146	17,585,712	391,626,792	35,602,435
5,893,719	5,814,779	5,496,573	5,401,412	8,346,532	7,777,089	66,962,032	6,087,457
6,056,611	6,221,513	6,371,377	6,697,079	6,601,836	6,932,297	63,817,087	5,801,553
10,268,353	10,098,112	9,683,044	9,338,628	9,900,395	9,129,497	115,011,755	10,455,614
13,741,703	13,802,432	13,933,509	14,039,985	16,566,590	14,667,674	162,865,849	14,805,990
11,258,850	11,123,511	10,964,319	10,728,849	9,855,737	10,264,304	120,492,908	10,953,900
3,584,812	3,717,423	3,873,899	3,893,974	4,567,941	4,189,037	40,246,717	3,658,792
23,351,557	23,442,854	23,868,571	23,769,252	23,128,425	23,124,231	259,158,220	23,559,838
48,206,587	48,120,861	47,543,141	46,186,432	43,118,774	42,235,491	514,440,183	46,767,289
12,953,609	16,620,969	16,468,561	18,666,025	18,404,668	17,382,264	165,873,150	15,079,377
4,187,612	4,273,891	3,520,841	2,455,558	1,994,779	2,130,016	40,955,533	3,723,230
24,177,220	24,021,185	24,538,112	25,472,865	29,513,384	27,589,121	273,891,818	24,899,256
2,591,042	2,292,749	2,279,615	2,004,982	1,777,372	2,957,065	30,850,184	2,804,562
14,510,392	14,544,382	16,410,395	17,902,671	18,769,370	26,853,515	159,101,866	14,463,806
1,495,171	1,487,286	1,505,429	1,406,734	2,052,748	2,188,120	16,996,052	1,545,095
2,920,576	625,816	398,831	36,092,659	5,136,891	1,406,681	60,546,659	5,504,241
546,012,022	549,660,074	553,993,404	589,381,464	570,372,185	570,064,603	6,141,779,173	558,343,561



## VII. FINANCE—PUBLIC DEBT.

TABLE showing the situation of the different FUNDS composing the inscribed DEBT, to the 1st of January of each Year, from 1814 to 1834.

Years.	Consolidated Annuities, or Rentes.	Life Annuities, or Rentes.		Pensions.	Securities. (See pp. 76 and 77.)		Annual Totals.
		Number of Lives.	Amounts.		Amount of Interest.	Amount of Capital.	
	fr.		fr.	fr.	fr.	fr.	fr.
1814	63,307,637	75,465	14,414,050	43,278,377	6,047,147	196,933,848	323,981,059
1815	63,605,278	72,774	13,946,412	56,506,958	4,271,033	200,318,487	338,648,168
1816	80,527,240	70,977	13,522,678	60,761,764	6,352,272	200,288,738	361,452,692
1817	94,801,211	67,393	12,965,150	68,445,127	12,496,697	253,896,839	442,605,024
1818	132,639,944	65,537	12,941,141	67,297,959	14,292,305	235,872,199	463,043,548
1819	177,760,616	62,336	12,305,205	64,812,020	14,319,287	229,774,794	498,971,922
1820	184,725,006	59,917	11,844,158	63,290,391	12,372,642	228,549,224	500,781,421
1821	186,574,889	56,870	11,234,945	64,808,960	11,173,819	223,963,766	497,756,379
1822	188,821,087	54,423	10,659,724	63,655,372	11,033,771	224,486,221	498,656,175
1823	189,333,606	52,339	10,225,170	64,544,030	10,732,745	223,148,371	497,983,922
1824	197,032,975	50,134	9,815,377	63,245,832	10,639,693	225,933,118	506,666,995
1825	197,036,309	47,754	9,343,791	61,555,531	10,691,445	226,915,289	505,542,365
1826	195,090,121	45,497	8,919,568	62,107,963	10,013,560	229,765,450	505,896,662
1827	197,607,867	42,938	8,424,472	60,563,105	10,026,861	228,590,733	505,213,038
1828	200,350,947	40,931	8,033,112	59,352,066	9,991,623	226,851,899	504,579,647
1829	202,973,883	38,938	7,692,083	57,936,639	9,957,991	225,280,389	503,840,985
1830	204,696,459	36,785	7,271,914	56,983,744	9,855,480	226,483,972	505,291,569
1831	206,436,074	34,868	6,879,389	58,328,267	9,856,365	238,061,002	519,561,097
1832	213,984,563	32,978	6,544,325	57,465,217	9,600,883	231,331,753	518,926,741
1833	218,504,682	30,972	6,137,357	56,736,874	9,603,084	229,789,701	520,771,698
1834	186,110,978	29,046	5,760,960	56,203,959	9,669,236	225,770,385	483,515,518
Yearly } Average }	170,567,684	50,898	9,946,713	60,375,245	10,142,759	225,333,628	476,366,029



VII. FINANCE—PUBLIC DEBT (*continued*).

TABLE showing the situation of the principal Proprietors of Perpetual Annuities or 'Rentes,' to the 1st of January of each Year, from 1825 to 1834.

Years.	Redemption Fund. (Its account of Annuities non-transferable.)	Endowments reverible to the Domain of the State, &c. &c.	Public Establishments.	Various Proprietors.	Royal Treasury. (Its account of Annuities to be transferred to the Profit of Sundries.)	Annual Totals.
	fr.	fr.	fr.	fr.	fr.	fr.
1825	35,762,985	1,581,785	32,069,641	121,221,285	6,400,613	197,036,309
1826	37,503,204	1,631,855	31,654,648	118,446,729	5,853,685	195,090,121
1827	37,503,204	1,680,921	31,594,599	118,867,336	7,961,807	197,607,867
1828	37,503,204	1,717,922	32,052,857	121,050,540	8,026,424	200,350,947
1829	37,503,204	1,693,154	33,019,147	122,749,083	8,009,295	202,973,883
1830	37,503,204	1,706,167	31,448,541	125,858,691	8,179,856	204,696,459
1831	39,472,114	1,720,348	31,559,319	126,813,449	6,870,844	206,436,074
1832	44,031,482	1,721,627	32,641,506	129,016,991	6,572,957	213,984,563
1833	48,455,879	1,725,356	32,933,617	128,035,623	7,354,207	218,504,682
1834	18,939,914	1,727,773	32,897,435	131,137,211	1,408,645	186,110,978
Yearly Average	37,417,839	1,690,691	32,187,131	124,319,694	6,663,833	202,279,188

TABLE showing the number of Parties inscribed.

Years.	'Rentes,' 5 per Cent.	'Rentes,' 3 per Cent.	'Rentes,' 4½ per Cent.	'Rentes,' 4 per Cent.	Annual Totals.
1825	162,833	. .	. .	. .	162,833
1826	135,525	4,164	493	. .	140,164
1827	155,177	15,501	502	. .	171,180
1828	153,761	27,745	517	. .	182,023
1829	151,777	36,916	521	. .	189,214
1830	151,427	43,610	533	. .	195,570
1831	152,344	39,929	598	454	193,325
1832	174,229	39,211	531	1,194	215,165
1833	179,723	36,192	557	1,246	217,718
1834	178,982	32,505	533	1,148	213,168
Yearly Average	159,577	30,639	531	1,010	188,036



## VII. FINANCE—BANK for

## TABLE of the 'RENTES,'

First Period—1801 to 1815.		Second Period—	
Amount of 'Rentes' (or Annuities) acquired from April, 1801, fr. to March, 1815 . . . . . 9,116,606			
It is to be observed, that the <i>whole</i> of the above amount is not the produce of Acquisitions made with the <i>Funds</i> of the <i>Endowment</i> , as will be seen by the following statement, showing that between <i>October</i> , 1806, and <i>March</i> , 1815, the only sum acquired by actual redemption was 170,661 francs, <i>viz.</i> —			
Amount of Inscriptions to <i>October</i> , 1806 . . . . . 4,632,604			
Various sums appropriated to the use of the Redemption Fund, in virtue of Special Imperial Decrees—1806 to 1815 . . . . . 4,313,341			
Actual Redemptions since <i>October</i> , 1806 . . . . . 170,661			
Total as above . fr. 9,116,606			



## REDEMPTIONS, OR SINKING FUND.

OR ANNUITIES Transferred.

1st January, 1816, to 1st January, 1834.

Payments from the Public Treasury :					Produce of Sales of Wood on account of the Sinking Fund, in execution of the Law of 25th March, 1817.	Interest until re-Payment of the Bonds.	Total of Receipts.
For Arrears of Redemptions by the Sinking Fund.							
Rentes, 5 per Cent.	Rentes, 4½ per Cent.	Rentes, 4 per Cent.	Rentes, 3 per Cent.	Total Rentes.			
fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
449,457,007 50	51,279 50	304,921 00	8,770,451 50	458,583,659 50	88,241,164 97	.	1,214,860,056 07
22,253,390 00	33,562 50	134,960 00	2,581,500 00	25,003,412 50	.	.	47,311,644 00
471,710,397 50	84,842 00	439,881 00	11,351,951 50	483,587,072 00	88,241,164 97	.	1,262,171,700 07
22,253,390 00	48,429 50	183,051 50	2,915,940 50	25,400,811 50	.	4,629 10	47,713,672 10
493,963,787 50	133,271 50	622,932 50	14,267,892 00	508,987,883 50	88,241,164 97	4,629 10	1,309,885,372 17

Sums from the Sinking Fund applied to the Redemption of Annuities.					Discount allowed on Payments in advance, and Expenses of collection of the produce of Woods sold.	Total of Expenses.
5 per Cent.	4½ per Cent.	4 per Cent.	3 per Cent.	Total.		
fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
730,046,093 17	1,219,481 29	5,007,531 73	473,778,330 32	1,210,051,486 51	4,775,825 99	1,214,827,312 50
3,995,907 88	831,474 77	2,730,345 33	39,786,449 59	47,344,177 57	.	47,344,177 57
734,042,001 05	2,050,956 06	7,737,877 06	513,564,829 91	1,257,395,664 08	4,775,825 99	1,262,171,490 07
685,449 03	263,468 36	878,905 89	12,463,221 18	14,291,044 46	.	14,291,044 46
734,727,450 08	2,314,424 42	8,616,782 95	526,028,051 09	1,271,686,708 54	4,775,825 99	1,276,462,534 53

Annuities Redeemed.				Mean Prices at which the Annuities were Redeemed.			
5 per Cent.	4½ per Cent.	4 per Cent.	3 per Cent.	5 per Cent.	4½ per Cent.	4 per Cent.	3 per Cent.
fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
44,308,611 198,169	62,546 37,450	245,802 117,234	19,876,292 1,535,720	82 38 100 82	87 74 99 91	81 49 93 16	71 51 77 72
44,506,780 34,198	99,996 11,859	363,036 38,359	21,412,012 494,868	82 46 100 22	92 30 99 98	85 26 91 65	71 95 75 55
44,540,978	111,855	401,395	21,906,880	82 48	93 11	85 86	72 03



VII. FINANCE (*continued*).

## GENERAL TABLE of Negotiations of 'Rentes,' and of Legislative Loans, from the 1st of April 1814 to the 1st of January 1834.

Nature of the 'Rentes,' or Annuities Negotiated.	Amount of Rentes alienated.	Produce of Loans.	Mean Rates at which the Loans were effected.
	fr.	fr.	fr. c.
Rentes, 5 per cent. . . . .	118,196,437	1,726,623,934	73·04
Rentes, 4 per cent. . . . .	3,134,950	80,000,005	102·07½
	121,331,387	(*) 1,806,623,939	
The 'National Loan,' closed 20th February, 1832, produced to the Treasury . . . . .		21,422,400	
Total . . . . .		1,828,046,339	
To the above amount must be added the Loans made on account of different Companies, in virtue of special laws, for the construction of Bridges, Canals, and various other works. The Loans of this nature, realized from 1821 to 1833, for the Interest and Redemption of which the Treasury is liable, amount to			
	fr. 140,290,200		
And the amount remaining to be paid subsequently to the 1st January, 1834, to . . . . .	2,140,000		
Making in all . . . . .		142,430,200	
Total of Treasury Loans, of all descriptions, from the 1st April, 1814, to the 1st Jan., 1834 . . . . .		fr. 1,970,476,539	

## Application of the proceeds of the Loans.

Budget of 1815 . . . . .	Fr. 35,863,200
" 1816 . . . . .	69,763,000
" 1817 . . . . .	352,989,035
" 1818 . . . . .	462,909,400
" 1819 . . . . .	32,921,318
Arrears previous to 1st January, 1810 . . . . .	7,000,000
Replacement in the Treasury, for the value of 'Rentes' purchased in 1818 . . . . .	40,579,604
Arrears from 1st January, 1810, to 1st January, 1816 . . . . .	350,000,000
Budget of 1821 . . . . .	4,123,790
" 1822 . . . . .	16,493,592
" 1823 . . . . .	71,640,000
" 1824 . . . . .	12,340,981
" 1828 . . . . .	50,512,682
" 1829 . . . . .	29,487,323
" 1831 . . . . .	259,874,385
" 1832 . . . . .	10,125,629

fr. (\*) 1,806,623,939



## VII. FINANCE (continued).

GENERAL TABLE of PENSIONS payable by the Treasury, at the commencement of each Year, from 1815 to 1833.

Years.	Peerage and Ancient Senate.		Civilians.		As National Recompenses.		Military.		Ecclesiastics.		As Donations.		Total.	
	Parties.	Sums.	Parties.	Sums.	Parties.	Sums.	Parties.	Sums.	Parties.	Sums.	Parties.	Sums.	Parties.	Sums.
1815	.	fr. .	9,227	5,415,286	.	fr. .	119,399	35,030,517	69,200	fr. 16,061,155	.	fr. .	197,826	fr. 56,506,958
1816	.	.	8,869	2,382,718	.	.	135,471	42,904,053	65,872	15,474,593	.	.	211,212	60,761,764
1817	.	.	8,206	2,334,688	.	.	149,109	62,589,740	57,856	13,520,699	.	.	215,171	68,445,127
1818	.	.	8,271	3,402,447	.	.	144,944	51,212,792	54,357	12,682,720	.	.	207,572	67,297,959
1819	.	.	7,010	2,361,799	.	.	144,096	50,499,122	51,389	11,951,099	.	.	202,495	64,812,020
1820	.	.	6,569	2,282,423	.	.	142,837	49,675,480	48,895	11,332,488	.	.	198,301	63,290,391
1821	.	.	6,072	2,221,974	.	.	145,527	51,920,215	46,206	10,666,771	.	.	197,805	64,808,960
1822	.	.	5,557	2,106,355	.	.	145,318	51,522,946	43,597	10,026,071	.	.	194,472	63,655,372
1823	.	.	5,252	2,137,311	.	.	143,968	51,303,468	41,360	9,491,981	3,125	1,611,270	193,705	64,544,030
1824	.	.	4,831	2,027,176	.	.	142,512	50,700,590	39,014	8,914,946	3,139	1,603,120	189,496	63,245,832
1825	.	.	4,501	1,932,468	.	.	140,488	49,634,374	35,851	8,392,805	3,136	1,595,884	184,976	61,555,531
1826	.	.	4,231	1,853,733	.	.	141,459	50,806,255	34,723	7,876,091	3,096	1,571,884	183,514	62,107,963
1827	.	.	3,913	1,782,787	.	.	139,842	49,848,565	32,624	7,373,519	3,080	1,558,234	179,459	60,563,105
1828	.	.	3,595	1,674,915	.	.	138,384	49,229,881	30,591	6,897,869	3,059	1,549,401	175,629	59,352,066
1829	.	.	3,366	1,720,890	.	.	136,315	48,239,848	28,619	6,445,000	3,041	1,530,901	171,341	57,936,639
1830	.	.	3,107	1,825,604	.	.	134,053	47,643,139	26,685	5,986,000	3,026	1,529,001	166,873	56,983,744
1831	192	2,405,500	2,854	1,840,768	.	.	131,695	47,039,185	24,688	5,528,463	2,998	1,514,351	162,427	58,328,267
1832	146	1,851,000	2,703	1,827,484	1,408	600,950	129,217	46,550,255	22,987	5,134,627	2,983	1,500,901	159,444	57,465,217
1833	128	1,564,000	2,490	1,733,400	1,408	613,700	127,011	46,683,221	20,886	4,662,469	2,952	1,480,084	154,875	56,736,874



## VII. FINANCE

TABLE showing the AMOUNT of SUMS deposited as Securities, and of the

Classes.	SUMS DEPOSITED.			
	To the 1st April, 1814.		On the 1st January, 1824.	
	No. of Persons.	Sums.		
		fr.	c.	fr. c.
Stock Brokers . . . . .	749	9,225,898	22	14,288,055 31
Attornies . . . . .	4,931	7,007,759	11	11,877,432 74
Cashiers and Paymasters . . . . .	228	6,237,940	72	5,427,405 01
Appraisers . . . . .	91	1,793,689	91	4,537,271 93
Custom Houses . . . . .	789	804,484	63	2,409,823 16
Indirect Taxes . . . . .	2,789	8,740,857	04	23,269,185 82
Registration . . . . .	4,443	14,640,651	27	13,042,649 76
Bailiffs (Gardes du Commerce) . . . . .	10	66,000	00	78,000 00
Registrars of Tribunals . . . . .	835	1,135,926	48	2,750,462 79
Registrars of Justices of the Peace . . . . .	3,896	3,233,888	62	4,702,466 22
“ Huissiers” . . . . .	12,290	4,756,261	29	8,788,468 28
Lottery . . . . .	1,134	4,530,557	93	4,221,207 96
Notaries . . . . .	15,850	20,202,723	81	35,935,015 09
Receivers . . . . .	16,779	27,496,179	04	30,297,465 48
Post-Office . . . . .	1,990	401,253	43	1,001,348 42
Communal Receivers . . . . .	13,248	4,531,636	75	5,548,013 52
Receivers General . . . . .	146	32,011,928	27	29,083,387 31
Special Receivers . . . . .	400	16,541,397	78	16,933,797 00
Secretaries of the Schools of Law . . . . .	11	88,000	00	56,000 00
Various . . . . .	32	241,637	00	1,165,909 79
Retailers of Tobacco . . . . .	23,381	32,287,277	78	9,087,016 46
Collectors of Town Dues (Octroi) . . . . .	303	957,899	65	1,372,736 60
Special Agents of Tobacco . . . . .	. . .	. . .	. . .	. . .
(See Page 70.) Totals . . . . .	104,325	196,933,848	73	225,933,118 65



*(continued).*

INTEREST due upon the same, at various Periods, from the Year 1814 to 1834.

## INTEREST DUE.

On the 1st January, 1834.		On the 1st January, 1819.		On the 1st January, 1824.		On the 1st January, 1834.	
fr.	c.	fr.	c.	fr.	c.	fr.	c.
14,038,092	17	523,764	27	573,044	09	566,269	81
11,438,917	72	551,631	74	521,967	85	470,917	76
5,462,798	72	389,107	78	295,653	08	225,210	69
4,723,559	11	191,619	15	199,005	95	202,137	39
2,753,153	41	136,196	54	109,187	18	116,816	88
20,266,051	28	1,039,751	65	969,050	73	853,085	95
13,261,530	68	966,294	92	605,715	12	606,645	88
66,000	00	2,507	83	2,850	39	3,120	00
2,771,363	65	121,299	38	113,377	72	114,272	52
4,763,789	25	228,555	13	199,699	38	194,378	89
8,251,344	64	506,183	87	500,128	86	458,695	71
3,574,077	64	211,769	88	198,384	14	155,684	08
35,497,706	63	1,716,715	35	1,530,442	06	1,504,791	39
30,170,775	74	1,951,033	82	1,656,450	19	1,353,176	47
2,787,086	15	34,247	09	46,577	68	144,504	73
7,348,330	41	299,691	05	259,174	27	316,117	65
27,819,476	49	3,289,069	57	1,459,259	07	1,097,205	81
16,627,595	48	1,505,650	14	858,045	90	668,316	75
64,000	00	3,200	00	2,240	00	3,104	44
3,306,447	94	15,865	92	39,342	38	112,884	84
8,614,991	59	586,769	93	439,280	46	403,495	09
1,751,296	64	48,362	62	60,817	02	82,811	86
412,000	00	.	.	.	.	15,592	26
225,770,385	34	14,319,287	63	10,639,693	52	9,669,236	85



VII. FINANCE (*continued*)—OPERATIONS OF THE BANK OF FRANCE,  
1800 to 1834.

Years.	Amount of Annual Trans- actions in Receipts and Disbursements* collectively.	Amount of Advances made to the State during the Year.	Average Prices of the Shares during the Year.	Dividends paid to the Shareholders per Share.		Reserves made on the Profits per Share.	
				First half Year.	Second half Year.	First half Year.	Second half Year.
Last 6 Months.	fr.	fr.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
1800	576,753,000	22,563,000	. .	. .	50 00	. .	45 00
1801	1,236,192,000	30,113,000	. .	50 00	50 00	5 00	10 00
1802	2,683,842,000	87,089,000	1,400 00	40 00	50 00	3 06	2 03
1803	3,560,000,000	132,017,000	1,317 50	55 00	58 71	3 61	. .
1804	3,650,000,000	175,735,000	1,070 00	40 00	40 00	21 15	19 00
1805	4,246,985,000	274,270,000	1,263 50	35 00	36 00	13 15	19 62
1806	3,648,669,000	230,106,000	1,168 50	36 00	56 00	0 81	. .
1807	3,022,622,000	27,758,000	1,250 00	39 00	43 00	6 16	6 52
1808	3,808,058,000	35,104,000	1,287 50	38 00	35 00	4 19	2 68
1809	3,942,501,000	71,428,000	1,232 50	37 00	37 00	3 50	3 50
1810	4,164,807,000	49,567,000	1,259 00	36 00	38 00	3 07	4 00
1811	3,294,041,000	161,365,000	1,252 50	35 00	31 00	2 50	0 52
1812	2,837,712,000	273,371,000	1,247 50	33 75	36 00	1 87	3 00
1813	3,361,477,000	343,310,000	957 50	39 00	36 50	4 50	3 25
1814	2,922,102,000	268,679,000	847 50	30 00	30 00	. .	. .
1815	3,312,297,000	62,467,000	966 00	32 00	32 00	1 00	1 00
1816	4,577,251,000	178,100,000	1,097 50	36 00	40 00	3 00	5 00
1817	7,675,868,000	184,091,000	1,302 50	41 50	46 00	5 75	8 00
1818	9,655,030,000	66,988,000	1,567 50	44 80	55 00	7 40	12 50
1819	6,706,123,000	216,343,000	1,480 00	36 00	30 00	3 00	. .
1820	6,655,030,000	159,636,000	1,455 00	30 00	34 50	. .	2 25
1821	7,596,632,000	106,211,000	1,537 50	42 50	41 50	6 25	5 75
1822	8,448,027,000	148,229,000	1,597 50	41 00	32 00	5 50	1 00
1823	9,125,333,000	357,341,000	1,532 50	39 50	42 00	4 75	6 00
1824	9,464,511,000	167,198,000	1,810 00	48 00	44 00	9 00	7 00
1825	8,232,930,000	40,031,000	2,087 50	49 00	49 00	9 50	9 50
1826	6,909,363,000	147,360,000	2,037 50	48 00	43 50	9 00	6 75
1827	6,410,664,000	65,048,000	2,012 50	39 00	35 00	4 50	2 50
1828	6,677,011,000	73,113,000	1,865 00	34 00	77 00	2 00	23 50
1829	8,977,003,000	132,943,000	1,842 50	30 00	34 00	. .	2 00
1830	10,270,950,000	291,520,000	1,692 50	42 00	43 00	6 00	6 50
1831	7,221,020,000	255,562,000	1,615 00	45 00	36 00	7 50	3 00
1832	6,621,685,000	87,983,000	1,650 00	38 00	33 00	4 00	1 50
1833	7,209,445,000	63,920,000	1,740 00	31 00	35 00	0 50	2 50
1834	7,694,896,000	36,883,000	1,760 00	37 00	43 00	. .	. .
Yearly Average	5,692,661,736	145,607,016	1,460 50	80 50		12 88	

\* The expenses of management are stated to amount, on the average, to a million of francs annually.



VII. FINANCE (*continued*).—TABLE of the AVERAGE PRICES of the PUBLIC FUNDS, from the Year 1799 to 1834.

Years.	Rentes, 5 per Cent.			Rentes, 3 per Cent.	Treasury Bonds.	City of Paris.			
	Highest.	Lowest.	Mean.			Rentes, 5 per Cent.	Bonds of 1,000 francs at 6 per Ct.	Acknowledgments of Liquidation	Annuities, 4 per Cent.
	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.	fr. c.
1799	22 50	7 00	11 62						
1800	44 00	17 38	29 39						
1801	68 00	39 50	52 78						
1802	59 00	50 15	54 70						
1803	66 60	47 00	54 03						
1804	59 75	52 20	56 63						
1805	63 30	51 90	57 60						
1806	77 00	60 40	65 16						
1807	93 40	70 75	79 81						
1808	88 15	78 10	83 12						
1809	84 00	76 25	79 56						
1810	84 50	78 40	80 93						
1811	83 40	77 70	80 69						
1812	83 60	76 50	80 82						
1813	80 20	47 50	68 99						
1814	80 00	45 00	64 19						
1815	81 65	52 30	63 89	.	8 53				
1816	64 40	54 30	58 61	.	3 55				
1817	69 00	55 05	63 66	.	0 09				
1818	80 00	60 00	70 25	.	.	72 09	1,102 76	77 23	
1819	73 15	64 85	69 11	.	.	.	1,127 18	79 73	
1820	79 60	70 10	75 17	.	.	.	1,324 79	90 47	
1821	90 65	73 75	84 36	.	.	.	1,273 24	97 68	
1822	95 00	83 25	89 72	.	.	.	1,270 73	101 38	1,072 39
1823	93 65	75 50	86 94	.	.	.	1,261 66	101 64	1,044 37
1824	104 80	93 00	100 75	.	4 00	101 10	1,377 86	101 83	1,083 90
1825	106 25	93 00	101 02	.	3 26	100 75	1,394 11	.	1,097 99
1826	101 05	95 75	98 25	66 54	3 76	98 97	1,374 00	.	1,100 57
1827	104 70	98 50	101 23	70 31	3 25	101 16	1,523 56		
1828	109 00	101 25	104 98	71 64	2 95	102 61	1,548 95		
1829	110 65	106 50	106 90	79 89	3 03	105 16			
1830	109 85	84 50	100 43	75 21	3 51	101 98			
1831	98 80	74 75	87 18	59 92	4 08	90 76			
1832	99 85	92 00	94 14	68 04	3 09	96 61			
1833	105 45	99 65	102 56	76 49	3 28	101 34	1,076 82		
1834	107 00	103 70	105 49	77 08	3 01	102 99	1,257 54		
Yearly Average.	83 94	69 65	76 79	71 68	3 53	97 88	1,301 01	92 85	1,079 84



## VIII. MILITARY FORCES—TABLE, showing the Effective

Years.	Number of Men, and Branch of Service (Home					
	Staff.	King's Military Household.	Gendarmerie.	Infantry.	Cavalry.	Artillery.
1818	3,397	2,039	13,402	66,114	19,203	8,950
1819	3,976	1,738	13,455	108,143	20,958	9,304
1820	4,058	1,738	13,331	126,580	27,129	10,230
1821	4,069	1,770	13,357	117,912	27,199	9,664
1822	4,075	1,781	13,872	146,922	29,401	12,274
1823	3,584	1,443	14,254	77,249	20,558	15,360
1824	4,317	1,828	14,568	150,157	34,801	20,186
1825	4,144	1,897	14,445	142,933	34,684	17,392
1826	4,187	1,850	14,547	142,419	36,246	17,010
1827	4,126	1,798	14,705	141,337	36,366	17,319
1828	4,059	1,736	14,510	150,858	37,036	18,322
1829	3,915	1,779	14,044	166,012	38,773	19,329
1830	3,997	1,726	13,466	159,762	38,584	18,825
1831	3,960	. .	15,582	246,435	49,224	32,941
1832	4,045	. .	15,929	262,263	50,000	34,898
Yearly Average	3,994	1,771	14,231	147,006	33,344	17,467

## TABLE, showing the Number of Young Men summoned

Description.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.
Number summoned to form part of the Contingent . . . . .	39,885	39,957	39,948	39,976	39,991	39,955	39,985	39,979
Number of Voluntary Enlistments . . . . .	. .	. .	. .	. .	6,004	3,691	5,870	12,984
Total of the Annual Levies . . . . .	39,885	39,957	39,948	39,976	45,995	43,646	45,855	52,963

\* The numbers for these four years are stated to be incomplete.



Force of the Army in each Year, from 1818 to 1832.

to which attached. Service).				Horses.	
Engineers.	Waggon Train.	Veteran Companies.	Total Number of Men.		
1,536	.	5,254	119,895	29,511	It is to be observed that the troops employed on foreign service are not included in the returns here given, and will account for the disproportions existing between some of the annual totals.
1,642	.	5,110	164,326	31,699	
2,001	.	4,924	189,991	34,794	
2,304	239	6,160	182,674	37,548	
2,265	250	6,086	216,926	38,804	In 1823 the army employed in Spain amounted to 115,855 men and 40,302 horses.
2,039	742	5,806	141,035	32,333	
3,039	1,622	5,506	236,024	54,123	In 1828 the expedition to the Morea was composed of 13,378 men and 1,338 horses.
2,977	793	5,331	224,596	48,450	
3,631	705	5,200	225,795	46,817	In 1830 the expedition to Algiers consisted of 31,330 men and 2,751 horses.
4,318	714	4,931	225,614	46,651	
4,725	754	4,920	236,920	46,883	The latter year is also remarkable for the disbanding of the troops of the King's military household, of the Royal Guard, and of the Swiss regiments, in consequence of the revolution.
5,582	810	5,079	255,323	46,863	
5,361	1,648	5,468	248,837	50,079	
8,062	4,374	8,343	368,921	79,354	
7,791	4,434	9,913	389,273	83,712	
3,818	1,424	5,868	228,410	47,175	

to form part of the Annual Contingents, from 1816 to 1832.

1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	Totals, 1816 to 1832.	Yearly Average.
59,785	59,908	59,718	59,661	59,621	59,944	79,841	79,823	79,847	917,824	53,989
2,084	4,890	5,225	3,012	8,456	5,899	11,409	30,329	11,908	111,761	8,597
61,869	64,798	64,943	62,673	68,077	65,843	91,250	110,152	91,755	1,029,585	60,563



# MILITARY RECORD

Name of the Army in which first enlisted				
Regiment	Company	Rank	Service	Remarks
1st	A	Private	1861-1862	First enlistment
2nd	B	Private	1862-1863	Second enlistment
3rd	C	Private	1863-1864	Third enlistment
4th	D	Private	1864-1865	Fourth enlistment
5th	E	Private	1865-1866	Fifth enlistment
6th	F	Private	1866-1867	Sixth enlistment
7th	G	Private	1867-1868	Seventh enlistment
8th	H	Private	1868-1869	Eighth enlistment
9th	I	Private	1869-1870	Ninth enlistment
10th	J	Private	1870-1871	Tenth enlistment
11th	K	Private	1871-1872	Eleventh enlistment
12th	L	Private	1872-1873	Twelfth enlistment
13th	M	Private	1873-1874	Thirteenth enlistment
14th	N	Private	1874-1875	Fourteenth enlistment
15th	O	Private	1875-1876	Fifteenth enlistment
16th	P	Private	1876-1877	Sixteenth enlistment
17th	Q	Private	1877-1878	Seventeenth enlistment
18th	R	Private	1878-1879	Eighteenth enlistment
19th	S	Private	1879-1880	Nineteenth enlistment
20th	T	Private	1880-1881	Twentieth enlistment
21st	U	Private	1881-1882	Twenty-first enlistment
22nd	V	Private	1882-1883	Twenty-second enlistment
23rd	W	Private	1883-1884	Twenty-third enlistment
24th	X	Private	1884-1885	Twenty-fourth enlistment
25th	Y	Private	1885-1886	Twenty-fifth enlistment
26th	Z	Private	1886-1887	Twenty-sixth enlistment
27th	AA	Private	1887-1888	Twenty-seventh enlistment
28th	AB	Private	1888-1889	Twenty-eighth enlistment
29th	AC	Private	1889-1890	Twenty-ninth enlistment
30th	AD	Private	1890-1891	Thirtieth enlistment
31st	AE	Private	1891-1892	Thirty-first enlistment
32nd	AF	Private	1892-1893	Thirty-second enlistment
33rd	AG	Private	1893-1894	Thirty-third enlistment
34th	AH	Private	1894-1895	Thirty-fourth enlistment
35th	AI	Private	1895-1896	Thirty-fifth enlistment
36th	AJ	Private	1896-1897	Thirty-sixth enlistment
37th	AK	Private	1897-1898	Thirty-seventh enlistment
38th	AL	Private	1898-1899	Thirty-eighth enlistment
39th	AM	Private	1899-1900	Thirty-ninth enlistment
40th	AN	Private	1900-1901	Fortieth enlistment
41st	AO	Private	1901-1902	Forty-first enlistment
42nd	AP	Private	1902-1903	Forty-second enlistment
43rd	AQ	Private	1903-1904	Forty-third enlistment
44th	AR	Private	1904-1905	Forty-fourth enlistment
45th	AS	Private	1905-1906	Forty-fifth enlistment
46th	AT	Private	1906-1907	Forty-sixth enlistment
47th	AU	Private	1907-1908	Forty-seventh enlistment
48th	AV	Private	1908-1909	Forty-eighth enlistment
49th	AW	Private	1909-1910	Forty-ninth enlistment
50th	AX	Private	1910-1911	Fiftieth enlistment
51st	AY	Private	1911-1912	Fifty-first enlistment
52nd	AZ	Private	1912-1913	Fifty-second enlistment
53rd	BA	Private	1913-1914	Fifty-third enlistment
54th	BB	Private	1914-1915	Fifty-fourth enlistment
55th	BC	Private	1915-1916	Fifty-fifth enlistment
56th	BD	Private	1916-1917	Fifty-sixth enlistment
57th	BE	Private	1917-1918	Fifty-seventh enlistment
58th	BF	Private	1918-1919	Fifty-eighth enlistment
59th	BG	Private	1919-1920	Fifty-ninth enlistment
60th	BH	Private	1920-1921	Sixtieth enlistment
61st	BI	Private	1921-1922	Sixty-first enlistment
62nd	BJ	Private	1922-1923	Sixty-second enlistment
63rd	BK	Private	1923-1924	Sixty-third enlistment
64th	BL	Private	1924-1925	Sixty-fourth enlistment
65th	BM	Private	1925-1926	Sixty-fifth enlistment
66th	BN	Private	1926-1927	Sixty-sixth enlistment
67th	BO	Private	1927-1928	Sixty-seventh enlistment
68th	BP	Private	1928-1929	Sixty-eighth enlistment
69th	BQ	Private	1929-1930	Sixty-ninth enlistment
70th	BR	Private	1930-1931	Seventieth enlistment
71st	BS	Private	1931-1932	Seventy-first enlistment
72nd	BT	Private	1932-1933	Seventy-second enlistment
73rd	BU	Private	1933-1934	Seventy-third enlistment
74th	BV	Private	1934-1935	Seventy-fourth enlistment
75th	BW	Private	1935-1936	Seventy-fifth enlistment
76th	BX	Private	1936-1937	Seventy-sixth enlistment
77th	BY	Private	1937-1938	Seventy-seventh enlistment
78th	BZ	Private	1938-1939	Seventy-eighth enlistment
79th	CA	Private	1939-1940	Seventy-ninth enlistment
80th	CB	Private	1940-1941	Eightieth enlistment
81st	CC	Private	1941-1942	Eighty-first enlistment
82nd	CD	Private	1942-1943	Eighty-second enlistment
83rd	CE	Private	1943-1944	Eighty-third enlistment
84th	CF	Private	1944-1945	Eighty-fourth enlistment
85th	CG	Private	1945-1946	Eighty-fifth enlistment
86th	CH	Private	1946-1947	Eighty-sixth enlistment
87th	CI	Private	1947-1948	Eighty-seventh enlistment
88th	CJ	Private	1948-1949	Eighty-eighth enlistment
89th	CK	Private	1949-1950	Eighty-ninth enlistment
90th	CL	Private	1950-1951	Ninetieth enlistment
91st	CM	Private	1951-1952	Ninety-first enlistment
92nd	CN	Private	1952-1953	Ninety-second enlistment
93rd	CO	Private	1953-1954	Ninety-third enlistment
94th	CP	Private	1954-1955	Ninety-fourth enlistment
95th	CQ	Private	1955-1956	Ninety-fifth enlistment
96th	CR	Private	1956-1957	Ninety-sixth enlistment
97th	CS	Private	1957-1958	Ninety-seventh enlistment
98th	CT	Private	1958-1959	Ninety-eighth enlistment
99th	CU	Private	1959-1960	Ninety-ninth enlistment
100th	CV	Private	1960-1961	Hundredth enlistment



ON THE  
STATISTICS OF EPIDEMIC CHOLERA,

&c. &c. &c.

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IN order to afford some means of estimating the value of the following statistical facts connected with the progress of Cholera in this country, and before submitting them to the immediate notice of the Society, Sir David Barry premises a few words as to the sources from which these facts have been derived, and as to the means adopted to collect them.

1. The late Central Board of Health, of which Sir David Barry was a member, was constituted by the Government early in November, 1831, for the purpose of suggesting, and, when approved, of carrying into effect, such sanitary measures as they might think best calculated to protect the public from the ravages of Cholera, with which the country was then threatened. That Board held its sittings in the Council Office, and received from the local Boards of Health daily returns, or tabular statements of the progress of the disease, specifying the number of new cases since last report; the deaths, recoveries, and the number remaining.

2. These local reports furnished the elements of two daily general returns, one for the metropolis, and one for the rest of Great Britain, made by the Central Board to the Government; which returns, in addition to the foregoing particulars, specified, opposite to the name of each place, the total number attacked and dead in that place (carried forward from day to day) since the commencement of the local epidemic.

3. So early as March, 1832, the Board issued a circular on the subject of returns, which was sent to every local Board then in existence, and also to every new Board immediately upon its being constituted. The whole number of these Boards amounted, before the termination of the disease, to more than 1,200, all constituted by Orders in Council. With each circular was forwarded the Form No. 5, headed "General Statistical Return," to be furnished by local Boards at the termination of their respective visitations, containing the following columns:—

Name of Township, Parish, or District.

Population according to Census of 1831, { Males.  
Females.

Date of first reported Case.

Date of Recovery, or Death, of last reported Case.







such the means adopted to collect and register these facts. There could be no error in the daily general returns made out at the Central Board, as they were drawn up and revised by two clerks, and afterwards checked and compared with the original local returns, and with the totals already reported, by the very able and most accurate secretary, William Maclean, Esq., of the Secretary's Office of the Customs, previously to their being entered on the minutes of the Board.

The comparatively small number of Statistical Returns of the Form No. 5, sent in by local boards, would seem to show that, in a free and actively-employed community, such as that in which we have the happiness to live, minute local details, requiring a large outlay of individual time and application, cannot be generally obtained, although asked for under high authority, more particularly when those called upon are expected to give to the task their talents and their trouble without even a hope of direct remuneration.

But whatever deficiencies may be found in the materials furnished by the records of the Central Board for a statistical history of Cholera in this country, these deficiencies certainly cannot, even in the slightest degree, be attributed to any want of the most prompt, liberal, and enlightened co-operation of the Government, nor can they, in justice, be set down to a want of exertion on the part of the Board to render the collection of facts for such a history as ample as the nature of circumstances would admit. Indeed the very issuing of the printed Form No. 5 proves that the Central Board of Health, long before the formation of this Society, was alive to the importance of accurate statistical records as connected with the public health, and with the science of medicine generally. Unfortunately, however, as soon as the dangers of the disease had passed over in any particular district, the local authorities and medical men betrayed, in most instances, as much indifference to the history of their own little epidemic as they had manifested anxiety when the visitation was only apprehended. Hence the small number of purely Statistical Returns (only 45) sent in to the Central Board. These returns could be completed only when the local epidemic had ceased to exist.

*Progress of Cholera in Great Britain, London not included.*

The first case (a fatal one) of Asiatic or spasmodic Cholera acknowledged in the Returns of the Central Board of Health occurred in Sunderland on the 23d of October, 1831, in the person of a keelman named Sproat: he died on the 26th\*. Owing, however, to the disease not having then spread very rapidly, and to the doubts so strongly expressed in the mean time, by the local authorities and medical men, as to the nature of that and other cases, the existence of Cholera in this country was not officially proclaimed before the 21st of November, the very day on which Sir David Barry's letter from Sunderland announced to the Government, for the first time, that he had just seen some cases in that town identical with the disease, which Dr. Russell and himself had so lately witnessed in St. Petersburg during the previous summer.

\* A very able and remarkable memoir "On the Appearance of Cholera in Sunderland in 1831," by Dr. Kell of the 82d regiment, quartered there at the time, leaves very little doubt that some sporadic and even fatal cases of the disease occurred in that town so early as the beginning of August. Dr. Kell had seen much of the disease in the Mauritius.



## ON THE STATISTICS OF

The first local Board of Health constituted by Order in Council was established in Sunderland on the 25th of November.

The first Return of Cholera cases made by that Board was on the 30th. That Report reckons the commencement of the epidemic from the date of Sproat's case.

Sunderland continued to be the only infected spot in Great Britain for one entire month, although its usual intercourse with other places continued perfectly unrestrained.

On the 26th of November a fatal case was reported from Newcastle-upon-Tyne; but as the nature of that case was also warmly disputed by the local medical men, it was not promulgated by the Central Board until another case occurred ten days afterwards.

From the latter period may be dated the spread of the disease from place to place, as will be seen by the following Table, No. I, exhibiting the number of cities, towns, and districts returned by local Boards to the Central Board, and by the latter to the Government, as actually suffering from the epidemic on the middle and last days of each month, from November, 1831, to 31st December, 1832, taken from the daily returns of the Central Board. The places declared free from the disease in the intervals are of course not included.

TABLE—No. I.

Dates.	Number of Districts returned on each date, as actually suffering from the Epidemic.	Dates.	Number of Districts returned on each date, as actually suffering from the Epidemic.
1831—November 15 ..	1	1832—June 14 ..	36 places returned.
„ „ 30 ..	1	„ „ 30 ..	27 „
„ December 14 ..	5 places returned.	„ July 15 ..	42 „
„ „ 31 ..	8 „	„ „ 31 ..	36 „
1832—January 15 ..	6 „	„ August 15 ..	52 „
„ „ 31 ..	14 „	„ „ 31 ..	68 „
„ February 15 ..	11 „	„ September 15 ..	88 „
„ „ 29 ..	12 „	„ „ 29 ..	59 „
„ March 15 ..	12 „	„ October 15 ..	63 „
„ „ 30 ..	17 „	„ „ 31 ..	33 „
„ April 14 ..	19 „	„ November 15 ..	23 „
„ „ 30 ..	22 „	„ „ 30 ..	16 „
„ May 15 ..	16 „	„ December 15 ..	8 „
„ „ 31 ..	32 „	„ „ 31 ..	2 „



TABLE No. II. exhibits the Progress of the Epidemic, as to the Total Number of New Cases and Deaths in each Month (London not included), from November, 1831, to 31st December, 1832.

Year.	Month.	New Cases.	Deaths.
1831	November . . .	319	97
"	December . . .	697	282
1832	January . . .	2,149	614
"	February . . .	2,332	627
"	March . . .	1,589	685
"	April . . .	1,890	975
"	May . . .	1,575	678
"	June . . .	3,274	1,183
"	July . . .	9,135	3,454
"	August . . .	20,912	7,635
"	September . . .	14,269	4,794
"	October . . .	8,578	3,698
"	November . . .	2,139	789
"	December . . .	325	138
	Totals . . .	69,183	25,649

The above Tables show, 1st, That cholera attained its acme in this country (London not included) in August, 1832.

2dly, That the new cases during the hottest months, viz., July, August, and September, were not much less than double the amount of those returned for the other eleven months, and amounted nearly to two-thirds of all that had occurred during the whole fourteen months already mentioned.

3dly, That the deaths during the three hot months were more than three-fifths of the whole number of deaths.

4thly, That the totals of the new cases and deaths, respectively, for the three coldest months, viz., November and December of 1831, and December, 1832, were considerably less in number than the new cases and deaths of even the healthiest of the other eleven months.

*Progress of Cholera in the Metropolis.*

With a short intermission in May\*, the disease prevailed as an epidemic in London during ten months of the year 1832, viz., from 9th February to 31st December.

\* On the 7th of May, 1832, London was declared free from cholera as an epidemic, by a certificate signed by the Metropolitan Medical Inspectors employed under the Central Board.



The following Table shows the number of new cases and deaths during each month of that period :—

TABLE No. III. exhibits the Progress of the Epidemic, as to the Total Number of New Cases and Deaths in the Metropolis in each Month, from the first appearance of the Disease there on 9th February to 31st December, 1832.

Year.	Month.	New Cases.	Deaths.
1832	February . . . .	130	81
„	March . . . .	1,599	834
„	April . . . .	818	426
„	May . . . .	125	70
„	June . . . .	305	180
„	July . . . .	3,027	1,362
„	August . . . .	2,939	1,240
„	September . .	1,347	685
„	October . . . .	700	382
„	November . . .	27	13
„	December . . .	3	2
	Totals . . . .	11,020	5,275

From Table No. 3 it will be seen that cholera attained its acme in London in July, and that the spread and fatality of the disease during the hot, the intermediate, and the cold months, stand nearly in the same proportions as in the other parts of Great Britain which suffered from the epidemic.

The total number of new cases and deaths in the whole of Great Britain, including the metropolis, was as follows, viz. :—

New cases . . . . .	80,203
Deaths . . . . .	30,924

which shows that about three-eighths of those attacked by the disease perished.

A comparison drawn between the number attacked in this country and the whole amount of the population would not be likely to lead to any useful conclusions, because, upon looking at the cholera map, it will be seen that the Orkney, the Shetland, and the Western Islands, escaped the disease altogether; that Scotland was but very partially attacked; that nearly the whole of North and South Wales remained free; whilst in England some whole counties, and very large portions of other counties, are unmarked by the epidemic spot.



*Analysis of the Statistical Returns.*

Of all the local Boards of Health which were established in Great Britain only forty-five sent in statistical returns to the Central Board. These returns comprehend a population of . . . . .		840,666
Of which were attacked . . . . .		10,918
Or, one in 77.		
Died . . . . .		4,152
Or, about 2-5ths of the attacked.		
Of the attacked were children under ten years of age . . . . .		2,017
„ Male adults . . . . .		4,374
„ Female do. . . . .		4,527
		<hr/>
		10,918
Died, children . . . . .		799
„ Male adults . . . . .		1,630
„ Female do. . . . .		1,723
		<hr/>
		4,152
Treated in hospitals . . . . .		2,419
„ In patients' dwellings . . . . .		8,499
		<hr/>
		10,918
Died in hospitals . . . . .		1,137
„ In patients' dwellings . . . . .		3,015
		<hr/>
		4,152

*Classes Attacked and Dead.*

Personal Attendants on the Sick :—

Attacked . . . . .	150
Died . . . . .	58

Washerwomen :—

Attacked . . . . .	65
Died . . . . .	36

Medical Men :—

Attacked . . . . .	30
Died . . . . .	6

Persons in easy circumstances :—

Attacked . . . . .	442
Died . . . . .	185

*Comparison of Ages and Sexes Attacked and Died.*

*Age.*—Proportion of children to adults attacked, less than *one* child to *four* adults.

*Sex.*—Male adults attacked to female ditto were as 43 to 45.

*Where treated.*—Of the whole number attacked  $\frac{1}{4}$  were treated in hospitals,  $\frac{3}{4}$  in their own dwellings.



*Died.*

Proportion of children to adults died, *one* child to *four* adults.

Died in hospitals, of all ages and sexes, rather less than one-half of those admitted.

Died in patients' dwellings, one-third of those attacked.

Deaths of male to female adults were as 16 males to 17 females.

In the 45\* Statistical Returns received from local Boards, distinguishing the months in which the greatest number of new cases and deaths were reported in their respective districts :—

1832, January	.	.	.	.	.	.	appears 4 times.
February	.	.	.	.	.	.	" 4 "
March	.	.	.	.	.	.	" 3 "
April	.	.	.	.	.	.	" 2 "
May	.	.	.	.	.	.	" 2 "
June	.	.	.	.	.	.	" 1 "
July	.	.	.	.	.	.	" 5 "
August	.	.	.	.	.	.	" 10 "
September	.	.	.	.	.	.	" 8 "
October	.	.	.	.	.	.	" 4 "
November	.	.	.	.	.	.	" 1 "
December	.	.	.	.	.	.	" 1 "
Total . . .							45

There is still one other very important point of view in which statistical facts are applicable, and have been already applied with most beneficial results to the study of cholera, as regards the commerce of this country : I allude to quarantine regulations.

As soon as spasmodic cholera appeared in Europe, but more particularly after it had approached and infected the shores of England, our commercial intercourse with foreign ports began to be harassed by the most vexatious obstructions, founded upon an alleged apprehension lest our crews or merchandize should carry the disease, whilst removal to lazaretto stations was either threatened or actually enforced. Our merchants, in the mean time, were suffering immense losses under the old, expensive, plague-precaution-system of delaying (often no doubt from interested motives) the landing or sale of cargoes. The history of cholera, however, by no means justified this excessive apprehension, and therefore the Central Board, in January, 1832, drew up a statement, entitled "Reasons, founded upon authentic facts in the history of Spasmodic Cholera, for establishing a Specific Code of Sanitary Restrictions for that Disease, considered independently of Plague, Yellow Fever, and other infectious maladies †," a copy of which is appended to the present paper ‡.

The total absence of all connection or resemblance between spasmodic cholera and the

\* In these Returns are included Bristol, Bilston, Wolverhampton, Manchester, Oxford, and Sheffield.

† This statement was circulated through all our diplomatic and consular agents abroad, was re-printed at the Customs, and distributed to the captains of all outward-bound ships. It was also printed and similarly distributed at the expense of private merchants at some of our out-ports.

‡ See page 10.



Plague of the Levant having been most satisfactorily established, some very leading practical facts of the highest interest in a sanitary point of view, ascertained during the summer and autumn of 1831 by the Superintendent-General of Quarantine, enabled him to adopt very important modifications in the restraint which it had been deemed advisable to impose on goods and vessels arriving from those ports of the Baltic then known to be infected with that disease.

1st. It was found that of all the men on board the floating Lazaretto at Stangate Creek, employed in unpacking and airing the cargoes of 732 vessels loaded with hemp, flax, hides, wool, bristles, &c., which had arrived from the Baltic between the 1st of June and 31st of December, 1831, not a single individual was attacked with disease of any kind.

2dly. That in 18 vessels which arrived in England, between the 26th of May and 24th of September, from infected ports in the Baltic, each vessel having had one or more cases of cholera on the passage, the greater number of attacks took place previously to the fourth, and only one attack so late as the sixth, day of sailing.

3dly. That although 150 vessels had one or more cases on board, either at the port of lading in the Baltic, or on their passage to England, between the 26th of May and 1st of December, 1831, yet only one attack took place so late as the sixth day of departure from the infected port. Instead, therefore, of *Forty Days' Quarantine*, which plague-precaution throughout Europe generally dictates, and which would have caused ruinous embarrassments to our commerce, only fifteen days', at first, and afterwards only ten days' quarantine, were required after arrival, for vessels with healthy crews and enumerated goods; whilst those with non-enumerated cargoes were subjected to a restraint of only three days, and that chiefly with a view to airing the bedding and clothes of the persons on board.

The following Return will show to what extent these embarrassments might have been carried:—

RETURN of the Number of Ships released from Quarantine from the 1st of June to the 31st of December, 1831.

From whence.	June.	July.	August.	September.	October.	November.	December.	Total.
Riga . . . . .	192	201	105	25	55	40	65	683
Petersburgh . . . .	27	105	61	59	35	39	60	386
Cronstadt . . . . .	16	52	172	71	77	55	99	542
Memel . . . . .	16	55	43	20	15	17	12	178
Dantzic . . . . .	9	26	23	7	11	7	6	89
Archangel . . . . .	..	4	160	106	41	37	2	350
Mediterranean . . .	124	62	76	50	107	119	55	573
From all other Ports .	143	253	306	237	255	278	452	1,924
Total . . . . .	527	758	946	575	596	592	751	4,725

England having thus set the example of regulating her quarantine by the statistical facts peculiar to the sanitary history of the disease, against which precaution is adopted, considerable mitigation very soon followed in the restrictions of every nation in Europe as applied to Cholera, with great relief to trade, and without compromising the security of the public health.



*Statement referred to in page 8.*

Central Board of Health, Council Office, Whitehall,  
4th January, 1832.

## QUARANTINE.

*Reasons, founded on authentic facts in the history of Spasmodic Cholera, for establishing a Specific Code of Sanitary Restrictions for that Disease, considered independently of Plague, Yellow Fever, and other infectious maladies.*

1.—If the sole object of sanitary police were to protect communities, at all risks, from being infected by their neighbours, medical science need not be consulted; as an absolute cessation of intercourse with the suspected would be the only measure necessary.

2.—But as such a measure would be nearly, if not altogether, impracticable, under the present circumstances of society, it is essential to endeavour to determine the point of time at which the danger of infection by any particular disease ceases, and, consequently, the period which free intercourse may be resumed with those who had been thought capable of communicating that disease to others.

3.—When sanitary police was first established, spasmodic cholera was unknown, and medical science in Europe was but little advanced. The very word *Quarantine*, and the forty-days' restraint which it indicates, do not seem to have been derived from a well-authenticated knowledge of the individual sanitary histories of the diseases against which the restriction was first directed, and have been since kept up, partly from ill-defined apprehension, and partly from reverence for old institutions. It must, however, be allowed, that a much longer separation from suspected persons is called for in diseases in which infective matter is proved to be generated, and thrown out upon the surface of the body, and upon the clothes, as in plague and small-pox, than where no such matter is generated.

4.—Yet it is certain, that even in these last diseases, the maximum of the period of incubation, or interval between the reception into the system of the infective germ and the manifestation of the symptoms, does not exceed one-third of the quarantine founded on the doctrines of Fracastorius and the sanitary laws of the sixteenth century.

5.—The utmost length of time during which the safety of the public health absolutely requires sanitary precautions, as to persons or effects supposed capable of communicating the infective germs of any given disease, ought to be determined by what experience in that disease may have established on the following questions, viz.—

1st. *What is the longest interval of time between the reception of the infective germ into the constitution and the manifestation of the first symptoms of the disease.*

2d. *The period during which an individual may retain the power of infecting others with the disease from which he is himself convalescent.*

3d. *The capability of certain classes of merchandize to retain, and afterwards to communicate, the germs of the malady.*



6.—Numerous and authentic data, tending to elucidate these three questions, so far as they regard spasmodic cholera, have been furnished by the extensive prevalence of that disease, since 1817, in our East Indian possessions; by our commercial intercourse with Russia, Prussia, and other infected countries on the continent of Europe; by the recent investigations of the Medical Commissioners sent to those countries from different governments; and finally, by the laborious and accurate observations of the most enlightened physicians of the countries where the disease has prevailed, or is now prevailing.

### FIRST QUESTION.

#### *Period of Incubation.*

7.—The following are a few of the many facts which seem to settle this period with tolerable accuracy.

“The subsidiary force under Colonel Adams, which arrived *in perfect health*, in the neighbourhood of a village in India infected with cholera, had seventy cases of the disease the night of its arrival, and twenty deaths the next day \*.”

8.—His Majesty’s 54th regiment landed at Madras on the 10th of May, in a remarkably healthy state, after a voyage of 48 days from the Cape of Good Hope, and marched into quarters in Fort Saint George. Cholera appeared amongst the men within three days after their landing †.

9.—In 18 vessels which arrived in England, between the 26th May and 24th September, from infected ports in the Baltic, each vessel having had one or more cases of cholera on the passage, the greater number of attacks took place previously to the *fourth*, and only one attack so late as the *sixth*, day of sailing.

10.—Dr. Becker, of Berlin, gives the subjoined statement in his Report ‡.

“From August 29th to September 26th there have been reported cases of cholera, in Berlin, 770.

“During that period, a second case has happened in the same house where one case had been reported,—

After 1 day	65 times.	After 4 days	16 times.	After 7 days	3 times.
„ 2 days	34 „	„ 5 „	21 „	„ 8 „	2 „
„ 3 „	23 „	„ 6 „	7 „	„ 9 „	0 „ §

11.—The British Medical Commission, lately returned from St. Petersburg, after detailing a series of cases upon this point, concluded thus:—

“That in the above cases, in all of which the time intervening between an only exposure to

\* See Bengal Report, pp. 22, 23. Many other strong facts, of a similar nature, will be found in that able work.

† See Madras Report, p. 22.

‡ See Papers on Cholera, published by authority of the Lords of the Council, p. 62.

§ Other sources of infection were open to all these persons, but the very great proportion of attacks (159 out of 171) having taken place within the first five days, furnishes, if not direct proof of, at least a strong presumption as to, the period of incubation.



infection and the subsequent development of the disease was most accurately marked, the period of incubation ranged between one and five days."

12.—The Genoese Medical Commission, sent to Hungary and Vienna to study the nature and history of Spasmodic Cholera, state, in two distinct Reports to the Sardinian Government, their decided conviction, derived from protracted observation, and personal experience in Cholera Quarantine Establishments, that those who have absorbed the germs of the disease are generally attacked before the *third*, and always before the *fourth*, day\*.

13.—The Board are aware that accounts have emanated from respectable sources, of persons having been seized with cholera many days after their departure from infected places; but as the history of these individuals during the interval between the supposed last exposure to infection and their subsequent attack does not appear to have been accurately noted, and as even these instances are very rare, the Board would not feel themselves justified in allowing their opinions to be influenced by such insulated statements.

14.—It appears, then, with regard to the first question, to be clearly established, that the longest interval between a well-authenticated *latest* or only exposure to the infection of spasmodic cholera, and the subsequent manifestation of that disease in a susceptible person, has been from *five to six days*.

## SECOND QUESTION.

*Length of time during which persons convalescent from Cholera may retain capability of infecting others.*

15.—In a sanitary point of view, persons recovering from any disease cannot be contemplated independently of their clothes, bedding, and other susceptible personal effects.

Whenever persons unaffected themselves with cholera (whether convalescent or not) have been conductors of the germs of the disease from the sick to the healthy, the latter have always been attacked within the period of incubation already specified\*.

16.—The Genoese physicians, already quoted, state that in the *Cholera Quarantine Establishment*, which they had such ample opportunities of observing, no one was ever attacked after the sixth day.

17.—No ship has ever arrived in this country from India since the first appearance of the disease there, nor within several thousand miles of our shores, with the disease or its germs on board, although 103,376 bales of cotton wool have been imported from that country within the last three years.

18.—No individual has ever been attacked on board ship south of the Baltic on the passage home, nor in any of the Quarantine Establishments in England, since cholera first broke out on the shores of that sea.

19.—But, as a single well-authenticated instance of cholera having been communicated to a healthy community by persons recently recovered from the disease, or by their effects, would be enough to demand quarantine-precaution to the amount, at least, of something

\* See the Report of the Genoese Board of Health.

† See Papers on Cholera published by authority, page 53.



above the longest interval between the recovery of the one and the first appearance of the disease amongst the other party; and as there is reason to believe that the first case of declared cholera at the Mauritius, in 1819, did not occur before the 15th day from the arrival at that island, on the 29th of October, of the *Topaze* frigate, and the landing of her sick, after having had several cases of cholera on the voyage from Trincomalee, which place she quitted on the 9th of the same month\*; and as the data which tend to determine the period indicated in the second are by no means so numerous nor so precise as those which bear upon the first and third questions; and as that period must be considerably modified by the conditions under which the recovering or recovered person or persons are placed with reference to cleanliness, ventilation, food, &c.; and as precaution naturally increases with undefined apprehension; the Board, until more precise facts on this question can be obtained, must consider persons ascertained to be but just convalescent from cholera, as coming under the most aggravated circumstances of a foul bill of health.

### THIRD QUESTION.

*Capability of merchandize to convey, and afterwards communicate, the infective germs of Cholera.*

20.—There is perhaps no question in the whole range of sanitary police on which so many and such irrefragable facts can be brought to bear, as on this; derived, too, from the most authentic and recent sources.

732 ships, loaded with hemp and flax from infected ports of the Baltic, arrived at the different quarantine stations in this country between the 1st of June and the 31st of December, 1831. Many vessels also arrived laden with wool and hides, yet not a single case of cholera occurred on board any of these ships outside the Cattigate sea, nor amongst the people employed in opening and airing their cargoes in the lazarets.

21.—At the hemp and flax wharfs in St. Petersburg, where several thousand tons of these articles arrived during the spring and summer of this year, from places in the interior where cholera existed at the time of their departure for the capital, the persons employed in bracking or sorting, and who generally passed the night amongst the bales, did not suffer so early in the season, nor so severely, as other classes of the general population.

The same observation holds good with respect to all the rope-walks of St. Petersburg; and the imperial manufactory of linen cloth at Alexandrofsky, where all the yarn used is spun from flax bracked and hackled on the spot.

22.—Struck with the importance of the above and other similar and authentic facts connected with the sanitary history of cholera;

Holding in view also the unnecessary embarrassments to every kind of intercourse, caused by the adoption of plague-precautions against individuals, communities, and merchandize affected with, or suspected of cholera only;

The strong inducements to elude sanitary restrictions, furnished by their own severity;

The inefficiency of cordons by land, from the impossibility of their being made perfect, except by a system of coercion entailing greater evils than the disease itself;

\* See the Journal of the Surgeon of the ship (Mr. Foy), Medical Gazette, 19th November, 1831, page 226.



The panic, and other dangerous moral, as well as physical, effects caused by vexatious insulations of families and communities;

Some of the most commercial nations of Europe, as well those still exempt from, as those already infected by, spasmodic cholera, have lately reduced, very considerably indeed, the quarantine restrictions which they had hitherto directed against that particular disease.

23.—Lubeck, a territory perfectly exempt from cholera, reduced its quarantine upon persons and merchandize arriving from infected ports, first from forty-one to twenty-one, and then to ten days.

24.—A similar reduction has taken place at Copenhagen.

25.—In Prussia, persons and merchandize from infected places are subjected to a detention of only five days\*.

26.—The Board of Health at Genoa have modified their quarantine code, taking as the basis of their new arrangements the maximum of the period of incubation of cholera, as determined by their own Medical Commission already quoted.

27.—Guided by what experience has already established, as to the laws which seem to regulate the propagation of cholera; and having in view the enlightened decisions which the sanitary authorities of other countries have come to on this subject, the Central Board of Health feel themselves justified in giving it as their opinion;—

1st.—That the maximum of sanitary restriction, or quarantine of observation, for an individual in health, but suspected of carrying the infective germs of spasmodic cholera as yet latent in his organization, need not exceed ten days.

2d.—That the period of separation from the healthy, of an individual ascertained to be but just convalescent from cholera, need not exceed twenty days.

3d.—That ordinary diarrhœa, continuing one or more days, being often the first symptom of cholera, persons arriving from infected places, labouring under even the mildest degree of purging, should not be admitted to free pratique before the 8th day after perfect recovery from the same.

4th.—That the clothes, bedding, effects, and sleeping-places, of all persons on board vessels from infected ports ought to be opened, aired, and purified during three days after their arrival, although the length of the voyage may have exceeded the period of quarantine adjudged in such cases to healthy ships and unsusceptible cargoes.

5th.—That the longest period of detention, for airing and purifying merchandize of the most susceptible class, and arriving under the most suspicious circumstances, need not exceed 15 days, to be counted from the day on which the airing may, *bonâ fide*, have commenced.

Finally.—The Board see no reason to believe that the above suggestions, directed against spasmodic cholera alone, require any modification in reference to climate.

(Signed)

E. STEWART, *Chairman.*

WILL. PYM, *Super.-Gen. of Quarantine.*

J. MARSHALL, *Lt.-Col.*

WILL. RUSSELL, *M.D.*

D. BARRY, *M.D.*

\* See Prussian State Gazette, 26th September, 1831.



ON THE

## CONNEXION BETWEEN CRIME AND IGNORANCE,

AS EXHIBITED IN CRIMINAL CALENDARS.

BY

G. R. PORTER, Esq., VICE PRESIDENT.

THE labours of this Society must necessarily be, in a great degree, limited to the collection of facts, which may form the ground-work for investigations concerning the various and complicated circumstances which influence the happiness and progress of social existence: but although, owing to the variety and complexity of those investigations, it must, in general, be a matter of necessity, for those who so employ themselves in the collection of facts, to leave their examination and their application to others, occasions will sometimes arise in which it may be permitted to the members of the Statistical Society to offer the result of investigations, by which they may have detected fallacies, and especially those which have been suggested, and are apparently supported, by inquiries more strictly coming within the limits of statistical labours. If this departure from the more ordinary course be ever allowable, it must assuredly be so in cases connected with the moral and intellectual progress of the human race; and it cannot, therefore, be necessary to detain the meeting by offering any apology for the following brief remarks upon some statements which have been made with relation to *the connexion between Crime and Ignorance, as exhibited in Criminal Calendars*.

It will be in the recollection of the members of this Society, that a paper was read at its last ordinary meeting, in which notice was incidentally taken of this subject, and wherein the opinion was adopted, that instruction does not tend to diminish the number of criminal offenders, but the contrary. This opinion, so startling to the sanguine promoters of general education among the people, has before been brought forward in a work of considerable merit—the *Essay on the Moral Statistics of France*, by Monsieur Guerry, who has supported his assertions by an appeal to figures given on the authority of the Minister of Justice in France. It is not intended to question the truth of those figures in the slightest particular, nor to express any doubt as to the correctness of the statements drawn from them by Monsieur



Guerry. There can, indeed, be no dispute concerning the fact, that in the departments of France, in which the greatest share of instruction is imparted to the young, there the number of criminals was the greatest in proportion to the population *at the precise period to which the figures adopted by Monsieur Guerry relate*; but it is much to be regretted, that, in the examination of a fact so important to the moral progress of our race, that gentleman should have contented himself with the returns of a single year, when records of the same description, and applying to a longer period of time, were equally open to him. By thus limiting his inquiries, it will be shown that Monsieur Guerry arrives at a conclusion at variance with the fact as exhibited in returns which embrace a longer period; and it might, perhaps, be thought sufficient for the establishing of this position, if reference were made to the documents whence the result, as here stated, has been drawn; but, as in the course of the investigation of those papers some other facts bearing upon this interesting question have been elicited, it is thought that a few minutes of the time of the meeting will not be ill occupied in hearing them stated.

It would have been a laborious and useless task to have gone into the examination of Monsieur Guerry's position with respect to each of the 86 departments into which France is divided. Every practical purpose will be equally well answered by confining that examination to a limited number of departments, occupying opposite ends in the scale of instruction. It so happens that the inhabitants of the four *most* instructed and of the four *least* instructed departments in France are nearly the same in point of numbers, the difference being only 8,174 in a population of more than 1,100,000, or about seven in 1,000.

The degree in which instruction is imparted in the different departments is ascertained by the examination as to their intellectual condition of the men drawn to fill the ranks of the army, and who, as they are taken indiscriminately from all ranks, may be supposed to exhibit very fairly the degree in which instruction is imparted throughout the departments.

According to this test, it appears that the proportion of the people who can read and write in the four most instructed departments is nearly three-fourths; while in the four least instructed it is little more than one-eighth: the exact proportions are—

Most instructed—1	Meuse	.	.	74 in 100.
"	2 Doubs	.	.	73 "
"	3 Jura	.	.	73 "
"	4 Haute Marne	.	.	72 "
Least instructed—83	Cher	.	.	13 "
"	84 Haute Vienne	.	.	13 "
"	85 Allier	.	.	13 "
"	86 Corrèze	.	.	12 "
The proportion for the whole of France being				38 in 100.

It so happened, that in the year 1831, which was taken by Monsieur Guerry for examination, there were charged with offences in the four most instructed departments 232 persons, and in the four least instructed only 187 persons. But, if we include in our examination the five years for which the returns are given, we shall find a wholly different result; and, indeed,



it will be seen that 1831 is the only year in which the excess of criminals is not ranged on the side of the least instructed departments.

YEARS.	MOST INSTRUCTED DEPARTMENTS, viz.— Meuse, Doubs, Jura, Haute Marne.				LEAST INSTRUCTED DEPARTMENTS, viz.— Cher, Haute Vienne, Allier, Corrèze.			
	Crimes against Persons.	Crimes against Property.	Total number of Criminals.	Number upon whom sentence of Death, and of forced Labour for Life, and for Terms of Years, was passed.	Crimes against Persons.	Crimes against Property.	Total number of Criminals.	Number upon whom sentence of Death, and of forced Labour for Life, and for Terms of Years, was passed.
1829	43	119	162	26	61	135	196	35
1830	61	146	207	38	92	137	229	50
1831	51	181	232	43	38	149	187	40
1832	37	119	156	28	85	132	217	41
1833	35	115	150	40	52	109	161	42
	227	680	907	175	328	662	990	208
Yearly Average } .	45	136	181	35	66	132	198	41.6

The annual average number of criminals in the five years is nearly 10 per cent. greater in the least instructed than it is in the most instructed departments; but the superiority of the latter will be more striking, if we observe the numbers charged with offences against the person, and those charged with depredations against property. The first, being the more peculiar sign of barbarism, we might expect to find the greater number of such offenders among the most ignorant, and accordingly the average annual number is, in the four darkest departments 66, while in the most enlightened it is only 45, or in the proportion of about 2 to 3. Crimes against property may be considered as among the consequences of civilization, since it is evident that the temptation to commit them must be greatest where the artificial wants of man are the most numerous and urgent, and where the accumulation of the means for their gratification is most considerable. It is, therefore, not surprising to find that this class of criminals is greatest where instruction, and its necessary consequent, civilization, are most expanded. This is the case as shown by the tables under examination, but in a much smaller degree than might be expected; the annual average excess of offenders against property in the four most instructed departments being only 4 in 132, or about 3 per cent.

If the object were simply to show that, by taking the particular year which he has adopted, Monsieur Guerry has fallen upon an erroneous conclusion, and that instruction, in even the unsatisfactory degree wherein it is now imparted to the mass, is not justly chargeable with



the bad effect which he has attributed to it, what has already been said would perhaps be sufficient. But the subject is one of such vital importance to the well-being and moral progress of society that it would be wrong to pass by an opportunity for subjecting it to a further examination. For this purpose it has been thought preferable to analyse the returns of the most unfavourable year of the series: If, by this means, it should be made apparent that the result is, in reality, favourable to the influence of instruction, the advocates for imparting knowledge to the people will have made out a case not only justifying their course, but affording the best hopes for the future, when their efforts shall be no longer limited to the imparting of the mere elements of knowledge—the scaffolding, as it were, for erecting a moral structure within the minds and hearts of the poor,—but when the most numerous class shall be taught to make a proper use of knowledge, by having impressed upon them a right understanding of all their relative and social duties.

It has been shown, that in the year 1831 the number of criminals in the four *most* instructed departments was 232, while in the *least* instructed the number was only 187, making a difference in favour of the latter of 24 per cent.; a fact which seems to bear out the unfavourable conclusions of Monsieur Guerry. It will at once be seen, however, that such conclusion, to be justly founded, must proceed upon the additional circumstance of the offenders being found among the instructed classes. Let us examine how far this is in agreement with the facts as disclosed in the French official tables. In those tables, the state as regards instruction, of the parties accused, is exhibited under four distinct heads, viz.—

1. Those who can neither read nor write.
2. Those who can read or write imperfectly.
3. Those who can read and write well; and
4. Those who have received instruction beyond the acquirement of mere reading and writing.

If we separate the criminals of the eight departments under examination, according to this classification, we shall find that, in the year 1831, they were divided as follow :—

	Four most instructed Departments.	Four least instructed Departments.
1st Class.—Those wholly uninstructed . . . .	101	158
2d „ Those who read and write imperfectly . . . .	103	12
3d „ Those who read and write well . . . .	24	13
4th „ Those still further educated . . . .	4	4
Total . . . .	<hr/> 232 <hr/>	<hr/> 187 <hr/>

We have seen that in the more enlightened departments the proportion of persons who can read and write is 73 in 100, while in the least instructed it is no more than 13 in 100. The population of the first being 1,142,454, it follows that only 308,463 persons are wholly uninstructed; and the number of offenders in this class being 101, it further follows that one person in 3,054 among them has been brought before the tribunals; whereas, among the



three instructed classes the offenders are 131 among 833,991 instructed persons, or only one in 6,366.

In the least instructed departments a similar examination gives us the following result:—The population being 1,134,280, of whom only 13 in 100 are instructed, there will be 986,824 wholly ignorant, and 147,456 who can read or write. The number of wholly ignorant offenders being 158, gives in that class only one offender in 6,245 persons; whereas the instructed classes, amounting in number to 147,456, include 29 offenders, or one in every 5,084 individuals.

It is not difficult to account for these results. In situations where education is pretty generally imparted the wholly ignorant will find themselves at a disadvantage, through the greater proportion of employments being occupied by those who are instructed. The ignorant man is therefore more impelled to lawless courses than in other situations, where the great bulk of the people being equally uninstructed, all have a nearly equal chance of obtaining honest employments.

If a similar examination is made for the two following years, 1832 and 1833, beyond which the statements do not reach, the result will be similar.

In the more enlightened departments the offenders who had not received instruction bore to the uninstructed portion of the inhabitants the proportion of

1 in 4,745 in 1832,

1 in 5,318 in 1833:

the proportion having been one in 3,054 in 1831, showing a great and progressive improvement. Of the instructed, the proportion of offenders, was—

In 1831 . . . 1 in 6,366,

„ 1832 . . . 1 in 9,164,

„ 1833 . . . 1 in 9,065.

In the least instructed department, the proportion of uninstructed offenders was—

In 1831 . . . 1 in 6,245,

„ 1832 . . . 1 in 5,422,

„ 1833 . . . 1 in 7,709.

Of offenders who had been instructed, the proportions were—

In 1831 . . . 1 in 5,084,

„ 1832 . . . 1 in 4,213,

„ 1833 . . . 1 in 4,468.

By means of its effective system of police, and through the necessity which it imposes upon every person who passes from one department of the kingdom to another to provide himself with a passport, the French Government is enabled to trace the progress of its individual subjects, and to ascertain with great accuracy their previous conduct. Taking advantage of this state of things, the Minister of Justice has, during the last few years, included in his annual statements returns of relapsed criminals (*reçidives*), and has thus given a tolerably good account of the extent to which dishonest and violent courses are carried on as a profession in France.



The following abstract from these returns bears so strongly and so interestingly upon the subject we have been now examining, that no apology is necessary for its insertion.

The total number of relapsed criminals (in this country we should call them professional offenders) who were brought before the Courts of Assize in France in the years 1831, 1832, and 1833, were 1,296, 1,429, and 1,318, respectively.

Separating these into classes according to their degree of instruction, the numbers are as follow :—

YEARS.	Wholly Ignorant.			Read or Write badly.			Read and Write well.			Superior Instruction.		
	Accused.	Acquitted.	Convicted.	Accused.	Acquitted.	Convicted.	Accused.	Acquitted.	Convicted.	Accused.	Acquitted.	Convicted.
1831	799	176	623	341	92	249	130	51	79	26	12	14
1832	857	173	684	422	95	327	131	40	91	19	7	12
1833	782	159	623	395	85	310	119	28	91	22	3	19
Yearly Average. }	813	169	644	386	91	295	127	40	87	22	7	15

It is much to be regretted that, in the examination of the conscripts in the different departments of France already alluded to, not any distinction has been made with regard to the degree of instruction which each individual has received. The persons drawn are divided simply into two classes—those who have received instruction, and those from whom it has been altogether withheld. Had the same course been followed as that which has been adopted for the classification, in this respect, of offenders, the result of the inquiry might have thrown a most important light upon one of the most interesting moral questions that can engage the attention of society. At present, all that we can learn from the inquiry made under the authority of the Minister of War is comprehended in the fact, that 62 out of every 100 persons, within the ages liable to military service, are wholly uninstructed; how many of the remaining 38 belong respectively to each of the three remaining classes, viz., those who read and write imperfectly, those who read and write well, and those who have received a superior degree of instruction, we have no means for ascertaining. It is clear to all who have bestowed any attention upon this subject, that the slight degree of instruction imparted to the first of these three classes has but little, if any, efficacy in restraining from immoral courses, and the whole question at issue depends upon the moral effect produced on the mind by that degree of careful culture which alone is deserving of the name of education, and which teaches men to respect the rights of others by imbuing them with sound moral and religious principles.

In the absence of such information as that to which we have here alluded, the following table may yet be interesting, and may afford gratification to those who believe that by



communicating a course of moral education to the great bulk of the community a vast proportion of the vice and misery now witnessed may be driven from society. It will be seen from an inspection of this table, that out of 4,222 criminals subjected to punishment in France in 1833, the large proportion of 3,777 belonged to the classes either wholly without, or who had received only the lowest degree of instruction. Of the two remaining classes 345 offenders were furnished from among those who can read and write well, and 100 from among those superiorly educated. It is impossible to conceive that these proportions can be in agreement with the state of education throughout the population of France, one of the most enlightened countries in the world; and if they be not so in agreement, it is equally impossible to resist the conviction, that education, even as it has hitherto been conducted, acts with a restraining power upon the evil passions and propensities of men.

If the subjoined table is examined further, it will be seen, that out of 50 persons sentenced to death, not one belonged to the well-educated class; that 47 in that class were subjected to only slight correctional punishments, and four to simple *surveillance*; leaving only 49 well-educated persons out of the whole population of more than 32 millions, or 1 in 664,678 persons, who, in the course of the year 1833, were considered deserving of punishments in any degree severe.

Punishments.	Cannot Read or Write.	Read and Write imperfectly.	Read and Write well.	Superior degree of Instruction.	Total.
Death . . . . .	34	10	6	—	50
Perpetual Labour . . . . .	90	44	4	3	141
Labour for different periods . . . . .	483	235	67	17	802
Solitary Confinement . . . . .	437	213	64	23	737
Transportation . . . . .	1	—	—	3	4
Imprisonment . . . . .	13	4	1	3	21
Correctional Punishments . . . . .	1,544	628	198	47	2,417
Children detained . . . . .	16	7	2	—	25
Surveillance . . . . .	10	8	3	4	25
	2,628	1,149	345	100	4,222
	3,777 89·4 per cent.		8·2 per cent.	2·4 per cent.	100 per cent.







ON THE  
INCREASE OF WEALTH AND EXPENDITURE  
IN THE  
VARIOUS CLASSES OF SOCIETY IN THE UNITED KINGDOM,  
AS INDICATED BY THE RETURNS MADE TO THE TAX-OFFICE,  
EXPORTS AND IMPORTS, SAVINGS' BANKS, &c. &c.

BY  
COLONEL SYKES, F.R.S.,  
VICE PRESIDENT.

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IN casting a glance over the parliamentary returns of the direct taxes, of the exports and imports of our principle staples, and the deposits in savings' banks, I have been so much struck by their remarkable increase in a very short space of time, that I am induced to offer to the Statistical Society the results of the comparisons I have made.

Although I believe that no one can examine the facts which I am about to adduce, without drawing from them the same conclusions at which I have arrived in my own mind, I have thought I shall best act in the spirit of the established principles of the Society by abstaining absolutely from all comment on them beyond what is necessary to show their connexion with each other. The evidence is derived from a comparison of recent with former returns; and I shall limit the application of it to those subjects which appear to me closely connected with the condition and wealth of the large classes of society, included in the gentry, the trading and manufacturing bodies, and the depositors in savings' banks, supposed to consist principally of small shopkeepers, domestic and farm-servants, &c.

The first article in the returns I shall notice is that of riding-horses and horses used to draw carriages for private use. In 1820 the number was 178,337, and in 1832 it was 182,878, exhibiting an increase of 4,541 horses; but the increase between 1826 and 1832, in consequence of the falling off between 1820 and 1826, was 7,810, which is the more remarkable as the decrease in the number of four-wheeled carriages, for private use, between 1829 and 1832, was 5,398, although the absolute increase in carriages, between 1820 and 1832, was 7,489, viz.—from 17,341 to 24,830. It must be inferred, therefore, that the increased number of horses was for the saddle: estimating the cost of each horse annually to be 40*l.*, there must have been an increased annual expenditure, between 1826 and 1832, of 312,400*l.* The duty upon 182,878 horses is 329,839*l.* 2*s.* I do not include, in the above number, horses not exceeding thirteen hands, used for riding or drawing carriages, which, in 1833, amounted to 24,899, paying a duty of 26,143*l.* 19*s.*, at 1*l.* 1*s.* each. In 1820 they only amounted to 8,699, but rose, in 1826, to 20,237, and, in 1832, to 24,639. The increase consequently

Riding-  
Horses, &c.



amounts to 16,200. Estimating the annual cost as low as 30*l.* each, the increased expenditure under this head is 486,000*l.*

It is probable the majority of these are kept for pleasure, as those let to hire, or rode by butchers, farming bailiffs, &c., are enumerated separately: they may, with probability, therefore, be considered for the most part as supported out of the interest of invested capital.

983,711 horses employed in labour, in 1820, paid a duty of 628,874*l.*; but most of the duties being repealed, the number, in 1832, paying the reduced duty of 10*s.* 6*d.*, was 124,076, and the exemptions were 645,959.

Private Car-  
riages.

The increase in the number of four-wheeled private carriages between 1820 and 1832 was 7,489\*; and if we consider that the support of each carriage, including horses, servants, liveries, duty, wear and tear, costs about 250*l.* per annum, we shall have an annual expenditure for this increase of 1,872,250*l.* employed for the luxury of carriage exercise. Carriages let to hire in the same period increased from 344 to 602; post-chaises and carriages from 5,064 to 6,761; public stage-coaches from 1,654 to 3,146. Descending a step in the grade of society, it is seen that four-wheeled carriages, drawn by *one horse*, in 1832, amounted to 11,951, in 1833 to 13,549; the increase being 1,598. For former years they are not distinguished, and the increase consequently cannot be given. Two-wheeled carriages, drawn by one horse, in 1832, were 47,250, independently of 2,625 let to hire: the former paid a duty of 153,562*l.* 10*s.*, and the latter 8,531*l.* 5*s.*; the total number in 1832, including common stage-carts, &c. &c., was 65,282; while, in 1820, the number was only 49,240, including 19,319 taxed carts, on which the duties were repealed in 1823 and 1825. The increase in one-horse carriages, presumed to be devoted to luxury, is from 29,221, in 1820, paying a duty of 189,936*l.*, to 47,250, in 1832, paying a duty of 153,562*l.*; the increase being 18,029 carriages.

Between 1832 and 1833 there is a falling off of two-wheeled carriages from 65,282, in the former year, to 50,002 in 1833; but it is only in the lower taxed vehicles at 1*l.* 10*s.*, common stage-carts, &c. &c.; the highest, assessed at 3*l.* 5*s.*, remaining nearly the same as before. I infer, therefore, that the duty on common stage-carts was repealed, as they do not appear in the returns for 1833.

Male Servants.

The next subject is that of male domestic servants for whom duty is paid, and here there is a progressive increase from 85,344, in 1820, to 104,841, in 1833, showing a difference of 19,497: deducting 14,978 men, already estimated in the cost of 7,489 carriages, there remain 4,519 servants. Allowing the annual expense of each male servant for wages, liveries, and keep, to average the moderate sum of 70*l.*, there is an increased annual expenditure of 316,330*l.*, beyond the expenditure of 1820, devoted to male domestic servants. The total number of male servants assessed to the duty under all heads, in 1832, was 226,479, paying a duty of 327,038*l.* 9*s.*; but this number, in 1833, in consequence of the repeal of the duty on travellers, clerks, book-keepers, shopmen, warehousemen, porters, cellarmen, &c., was reduced to 118,669, paying a duty of 202,308*l.* 11*s.* From this number, deducting stage-coachmen, guards, coachmen, persons hired out, &c., there remain 104,841 gentlemen's servants as adjuncts of luxury.

\* From 17,341 to 4,830.



In armorial bearings we find a steady increase from 22,627, in 1820, to 25,179 in 1826, and 29,744 in 1833, indicating a difference of 7,117. It thus appears, although some carriages were put down in 1829, that armorial bearings were not abandoned. The duty paid was 60,845*l.* 8*s.* in 1833, and the increased amount of expenditure for 7,117, at 2*l.* 8*s.* each, is 17,080*l.*

Armo-  
rial  
Bearings.

The number of dogs paying duty has increased from 312,311, in 1820, to 337,951 in 1832, or 25,640, which is unexpected, as it cannot be referred to a proportionably-extended ardour for shooting; there being a difference of 372 game-certificates only at the two periods for persons in their own right, although an increase took place between 1820 and 1826 of 4,425 certificates. Greyhounds fell off from 21,297 to 15,840. Other sporting dogs, or where two or more were kept, remained nearly stationary, the difference being between 105,149 and 106,316 only; while domestic dogs, where not more than one was kept, increased from 185,865 to 215,795. The whole amount of duty paid upon dogs in 1832 was 176,579*l.*: in 1820 it was 169,247*l.* The duty on packs of hounds at the two periods was 2,772*l.* and 2,592*l.*

Dogs.

Game certificates remain nearly the same as in 1820, although they have fluctuated a good deal in the intermediate years. In 1820 there were 41,437 paying a duty of 143,926*l.* 17*s.*, and in 1833 they were 41,165, duty 143,902*l.* 2*s.*

The taste for fox-hunting, or rather the extension of the means for promoting this amusement, would appear to have been nearly stationary for twelve years, there being an increase of only five packs of hounds between 1820 and 1832.

Packs of  
Hounds.

Under-gamekeepers have increased from 345, in 1820, to 579 in 1832; but gamekeepers have diminished in the same periods from 5,335 to 4,309, indicating no extension of preserves, and less activity than formerly in the precautions taken against poachers.

Gamekeepers.

We cannot say of the turf as of fox-hunting, for we find that race-horses have increased from 674, in 1820, to 997, in 1832.

Race-Horses.

For the septennial periods, from 1820 to 1826, and from 1827 to 1833, the average annual stamp-duty upon playing-cards was 22,329*l.* for the first period, and 15,922*l.* for the last period; the falling off being 28·7 per cent.: but for the same periods the average annual duty for dice was 1,223*l.* and 1,328*l.* respectively; the increase being 8·6 per cent.

Playing-Cards.

Hair-powder paid a duty in 1833 of 13,219*l.*, and in 1835 of 11,001*l.* only: although the use of it is diminishing, it still requires a capital of 275,025*l.*

Hair-Powder.

Contingent on the preceding subjects is the consumption of articles, not of absolute luxury, certainly, neither are they of absolute necessity—tea, coffee, sugar, tobacco, spirits, wines, &c.

The average annual quantity of tea charged with duties of Excise for septennial periods, from 1820 to 1826, and 1827 to 1833 inclusive, was respectively 23,728,249 lbs., and 29,515,799 lbs., being an annual increase of 5,787,550 lbs., or 24·4 per cent. The Excise duty in 1820 was 3,085,764*l.*, and in 1833 it was 3,444,102*l.* \*

Tea.

\* In the year ending 5th January, 1836, the quantity entered for home consumption was 36,606,295 lbs.: being 24 per cent. increase on the septennial period ending with 1833.



**Coffee.** *Coffee.*—The average quantities annually cleared for home consumption during each of the same septennial periods were respectively 9,052,845 lbs., and 20,470,978 lbs., the increase being 126 per cent. \*

**Sugar.** *Sugar.*—The annual average quantities of sugar retained for home consumption in the same septennial periods were respectively 3,171,151 cwts. and 3,614,134 cwts., the difference being 442,983 cwts., or 13·9 per cent. only—a trifling increase, the more remarkable as the price of fine Jamaica sugar, duty paid, had diminished in the same periods 11·5 per cent.; that is to say, from an average of the above periods of seven years, from 73s. per cwt. to 64s. 6d. per cwt. † If we look to the effect of the cheapening of sugar upon its consumption, it is found that the average annual population of the United Kingdom for the first septennial period was about 21,935,225, and the average annual consumption 3,171,151 cwts., which gives about 15 lbs. 7-10ths avoirdupois for each individual: for the next septennial period the population averaged 22,973,699 souls; and the average consumption of sugar was 3,614,134 cwts., being 17 lbs. and 6-10ths each. If the years of the census be taken, the results are nearly the same. In 1821 the population was 21,193,458, and the sugar consumed 3,056,882 cwts., or 16·2 lbs. each; and in 1831 the population was 24,271,763, and the sugar consumed 3,787,391 cwts., or 17·4 lbs. each individual. In consequence of the diminished cost, each individual consumed 12·1 per cent. more sugar in the last septennial period than had been consumed in the first septennial period.

**Tobacco and Snuff.** In the same septennial periods tobacco and snuff for home consumption averaged annually 16,974,983 lbs., and 19,413,679 lbs.; the annual increase of 2,438,696 lbs. in the last period being 1·43 per cent. The increased consumption may be accounted for by the reduction in the duty in 1825.

**British Spirits.** In the same periods the average annual quantity of British spirits charged with the duties of Excise in the United Kingdom was respectively 13,111,781 gallons, and 21,942,764 gallons, exhibiting the frightful annual increase of 8,830,983 gallons, or 67·3 per cent. It may be observed, that increased consumption and reduced duties were contemporaneous. From 1820 to 1823, inclusive, the quantity annually consumed averaged between 9,000,000 and 10,000,000 of gallons. In the last year a reduction in the duty in Scotland, from 6s. 2d., and in Ireland, from 6s. 7d. to 2s. 4½d., took place, and the consumption the next year rose to 15,433,227 gallons. In 1826 the duty was reduced in England from 10s. 6d. to 7s. per gallon; and in the following year, and in 1828, the consumption rose respectively to 19,684,425 and 23,413,770 gallons; but in 1830 the Scotch duty was raised to 3s. 4d. per gallon, and in 1831 the consumption fell off to 21,845,408 gallons. In 1820 the duties were 4,012,707l.; and in 1833, notwithstanding the reductions, they rose to 5,252,809l. In 1820 the duties on foreign and colonial spirits were 2,776,749l., and in 1833 they were

\* The quantity entered for home consumption during the year ending 5th January, 1836, was 23,326,080 lbs.; the increase being 157 per cent.

† The quantity of sugar entered for home consumption in the year ending 5th January, 1836, was 4,466,000 cwts.; being an increase on the last septennial period of 23·5 per cent. For the same year, tobacco and snuff amounted to 22,115,882 cwt., being an increase of 13·9 per cent.



3,130,657*l.* The import-duties per gallon on foreign spirits remaining the same from 1820 to 1833 inclusive, the quantities imported varied very little; but the relative proportions of the different spirits must have varied to account for the increase in the Customs. In 1820 the total amount of foreign and colonial spirits imported was 8,366,537 gallons, and in 1833 it was 8,269,295 gallons. The quantities upon which consumption-duties were paid were, in 1820, 3,446,460 gallons, and, in 1833, 4,879,967 gallons.

The average annual quantity of wines of all sorts cleared for consumption for the septennial period ending 1826 was 5,403,358 imperial gallons; and for the septennial period ending 1833 it was 6,380,165 gallons, the increase of 976,807 gallons being 18 per cent.; but although the increase is considerable, comparing one of these periods with another, the average annual consumption is much less than it used to be between 1790 and 1803, notwithstanding the increased population: the habit, therefore, of wine-drinking is rather weakened than strengthened\*.

The consumption of beer and ale has scarcely increased. In 1831 the Excise duty ceased. From 1820 to 1824 inclusive, the average annual consumption was 7,743,027 barrels; and from 1825 to 1830 inclusive, 7,832,899 barrels; the increase, therefore, being only 1·1 per cent., while the consumption of spirits had risen to 67·3 per cent.

For the same period the average annual consumption of malt was, respectively, 31,098,177 bushels, and 35,503,404 bushels, the increase being 10·9 per cent.; and notwithstanding the Excise duty was reduced from 3*s.* 6*d.* and 2*s.* 6*d.* per bushel in 1822, the net produce, which in 1820 was 5,088,195*l.*, in 1833 was 4,923,074*l.* In 1834 the duty was 5,275,605*l.*, and the quantity 41,145,596 bushels. The average annual consumption of hops has not varied much: in 1834 the quantity was 39,587,497 lbs., and the duty 329,895*l.*

But probably one of the most satisfactory tests of the increased comforts of the people being commensurate with general improvement is in the increased consumption of soap. In the septennial periods before noticed the annual average was, respectively, 101,755,908 lbs. and 124,295,429 lbs.; the increase of 22,539,521 lbs. being 22·1 per cent.

I now proceed to facts illustrative of the condition of the trading and manufacturing body, and first in regard to exports and imports of the raw material. Under the article Cotton, imported for home consumption in the years 1832 and 1833, respectively, we find 259,412,463 lbs. and 293,682,976 lbs., being an increase in one year of 11·7 per cent. The average of ten years, 1814 to 1823, gives 120,623,721 lbs. per annum; and for ten years, 1824 to 1833, 227,052,851 lbs., indicating an increase in the last period of 88 per cent.† As the annual importation of India cotton has been nearly stationary since 1820, the average annual increase of 106,429,130 lbs. has been from America and other foreign countries. Taking quinquennial periods, from 1820 to 1834, inclusive, there was imported for home consumption an annual average increase for the first period, 16,525,969 lbs.; second period, 28,111,871 lbs.; and the third period, 33,753,201 lbs.; the increase being 104 per cent.

\* The quantity entered for home consumption in the year ending 5th January, 1836, was 6,420,342 gallons.

† In the year ending 5th January, 1836, this amount was swelled to 326,407,692 lbs., making a difference of 32,724,716 lbs., or 11·1 per cent. upon 1833; and the increase in the home consumption has been more than 100 per cent. since 1820.



**Wool.** *Wool.*—In 1832 the quantity of wool for home consumption was 27,666,350 lbs.; in 1833 it was 39,066,620 lbs.; manifesting an increase in one year of 41·2 per cent. The declared value of the woollen exports in these years respectively was 5,244,479*l.* and 6,294,432*l.*, being an increase in the last year of 20·1 per cent. The exportation of wool has risen from 64,585 lbs. in 1820, and 291,318 lbs. in 1821, to 4,992,110 lbs. in 1833\*. The importation has risen from 9,775,605 lbs. in 1820, and 16,622,567 lbs. in 1821, to 38,046,087 lbs. in 1833; and the annual average for seven years, from 1820 to 1826 inclusive, was 20,228,575 lbs.; and from 1827 to 1833 it was 30,150,697 lbs.; the increase being 49 per cent.

**Silk.** *Silk.*—An average of ten years' importation for home consumption, from 1814 to 1823, gives 1,580,016 lbs. per annum, but an average for the next ten years gives 3,651,810 lbs. per annum; the improvement of 2,071,794 lbs. being to the amazing extent of 131 per cent.† But the declared value of British silk manufacture exported to various countries from 1827 to 1834, both inclusive, exhibits more remarkable features of annual increase. In 1827 the value of the silk manufactures exported was 236,113*l.*, and in 1834 the value was 637,198*l.*; the increased value being to the extent of 169 per cent.! The average quantity annually imported of raw and waste silk from 1827 to 1834, both inclusive, was 3,879,224 lbs.

**Indigo.** *Indigo.*—For septennial periods from 1820 to 1833, inclusive, the average annual quantity of indigo cleared for home consumption was, respectively, 2,255,029 lbs., and 2,494,467 lbs.; the increase being 10·6 per cent.

**Lac Dye.** *Lac Dye.* for the same periods, averaged 366,543 lbs. and 488,904 lbs. annually, the increase being 33·4 per cent.

The other dyeing stuffs exhibit even greater proofs of increased consumption for the same periods. Gum animi and copal averaged annually 89,812 lbs. and 137,276 lbs., the increase being 52·6 per cent. In 1820 there was consumed—of cochineal, 66,200 lbs.; of gum arabic, 5,663 cwts.; of gum tragacanth, 8,935 lbs.; of logwood, 4,347 tons; and of madder-roots, 19,737 cwts. In 1833, the quantities consumed of these dyes were—cochineal, 178,246 lbs.; gum arabic, 12,078 cwts.; of logwood, 17,595 tons; of gum tragacanth, 58,827 lbs.; and of madder-roots, 60,549 cwts. These are strong proofs of the prosperity of the dyeing branch of manufactures.

**Olive and Castor Oil.** Connected with this subject also is the remarkable increase in the importation of olive and castor oil, from 1827 to 1834 inclusive. The former increased from 1,028,174 gallons to 2,318,142 gallons, or 124·4 per cent; the latter, from 156,298 lbs. to 694,371 lbs., or 273·8 per cent. It must be understood, that this increased consumption of castor oil has not been in medicine, but in manufactures.

**Flax.** *Flax.*—Flax and tow for home consumption in 1832 amounted to 984,869 cwts., and in 1833 to 1,112,190 cwts., being an increase in the last year of 12·9 per cent. The export value in 1832 was 1,783,432*l.*, and in 1833, 2,199,441*l.*, indicating an improvement of 23½

\* The quantity entered for home consumption for the year ending 5th January 1836, was 43,185,993 lbs. The exportation in this year amounted to 4,101,700 lbs.

† For the year ending 5th January, 1836, the quantity entered for home consumption was 5,788,458 lbs.



per cent. The amount of flax for home consumption for seven years, from 1820 to 1826, was 4,484,867 cwts.; annual consumption 640,695 cwts.: and for seven years, from 1827 to 1833, it was 6,659,941 cwts.; annual consumption, 951,420 cwts.; the increase of 2,175,074 cwts. in the last period being 48·4 per cent. For the last seven years the increased capital employed in flax was 4,567,584*l*\*, and the increased annual outlay 652,522*l*.

*Iron.*—The export value of 147,636 tons of iron, in 1832, was 1,190,749*l*.; and in 1833 it was 162,815 tons, value 1,405,035*l*.; the increase being, therefore, 19½ per cent. The importation for home consumption, from 1820 to 1826 inclusive, was 76,413 tons, and from 1827 to 1833 inclusive it was 98,201 tons: the average annual importation of the two periods being, respectively, 10,914 and 14,029 tons, the improvement of 3,115 tons, consequently, being 28·5 per cent. Taking the average price of bar-iron from 1820 to 1833 to be 8*l*. per ton, which is less than the truth, the annual increase is 24,920*l*.

Looking to the export iron manufacture, there are the same features of improvement. In 1820 the total weight of manufactured iron exported was 85,068 tons; in 1827 it was 92,313 tons; and in 1833 no less than 162,815 tons: the increase, therefore, is 91·4 per cent.

In hardware and cutlery the declared export value rose from 949,085*l*. in 1820, to 1,466,362*l*. in 1833, and 1,485,239 in 1834, or 56·5 per cent.

*Ships.*—There are several features in the shipping and tonnage of the empire at large, including the United Kingdom, possessions in Europe and the Colonies, calling for attention. From the year 1820 to 1834, inclusive, the tonnage has increased from 2,648,593 tons and 25,374 ships to 2,716,100 tons, but reduced to 25,055 ships; the increased tonnage being 67,507, and the decreased number of ships being 319. Looking into the details, it is seen that the United Kingdom and possessions in Europe in 1820 had 21,969 ships of 2,439,029 tonnage, and in 1834 there were 19,975 ships of 2,312,355 tonnage; and, with regard to the Colonies, there were 3,405 ships in 1820 of 209,564 tonnage, and in 1834 there were 5,080 of 403,745 tonnage. But it would appear that up to 1827 the registers contained numerous vessels that ought to have been struck off; and it is only from 1827 (inclusive), when there was a new registry, that the numbers can be looked upon as accurate; and it is from this period only that any legitimate deductions can be drawn. Taking two periods of four years each, from 1827 to 1834 inclusive, the first period exhibits an annual average, belonging to the *United Kingdom*, of 19,363 ships and 2,193,997 tons; and the second period, of 19,694 ships of 2,267,468 tonnage; the annual average increase being 331 ships, or 1·7 per cent., and the tonnage 73,471, or 3·3 per cent. The colonial shipping for the same periods exhibited respectively the annual average of 4,253 ships of 312,880 tons, and 4,835 ships of 370,209 tons; the increase being 582 ships, or 13·6 per cent., and 57,320 tons, or 18·3 per cent. With regard to the shipping of the empire, the following are the results for the above periods respectively:—Annual average from 1827 to 1830, 23,617 ships of 2,506,877 tons; and from 1831 to 1834, 24,529 ships of 2,637,672 tons; the annual average increase being 912 ships, or 3·8 per cent., and 130,795 tons, or 5·2 per cent. The great increase, therefore, has been in

\* For the year ending 5th January, 1836, there were entered for home consumption 742,665 cwts.



the colonial shipping. The total number of men manning the shipping of the empire in 1834 was 168,067.

Shipping in  
the Port of  
London.

Adverting to the number of British and foreign ships which entered the port of London from foreign parts in the years ending the 5th of January, 1833, 1834, and 1835, it is seen there has been a progressive increase from 3,274 British ships of 640,057 tons burden to 3,786 ships of 735,693 tons burden in 1835; the increase being 512 ships, and 95,636 tons: the former being 15·6 per cent., and the latter 14·9 per cent. The foreign shipping which entered in the same years increased from 886 ships of 154,514 tons to 1,280 ships of 216,063 tons; the increase on the ships being 44·5 per cent., and on the tonnage 39·8 per cent. The total increase on British and foreign shipping which entered the port of London being from 4,160 ships of 794,571 tons to 5,066 ships of 951,756 tons, on the 5th January, 1835, or 906 ships and 157,185 tons. Taking averages of six years, from 1820 to 1825 inclusive, and from 1826 to 1831 inclusive, the British and foreign shipping that entered the port of London, *annually*, from foreign parts is as follows: for the first period, British ships 3,289, tonnage 641,420; foreign ships 1,046, tonnage 174,286: for the second period, British ships 3,958, tonnage 753,438; foreign ships 1,425, tonnage 220,742. It hence follows that the tonnage which entered the port of London for the year ending 5th January, 1835, exceeded the annual average for the first period by 136,051 tons, and approached within 22,424 tons of the annual average of the second period.

Official value  
of Imports and  
Exports.

The annual average *official* value of imports from 1820 to 1826 inclusive was 35,558,106*l.*; of exports of the produce and manufactures of the United Kingdom, 43,447,940*l.*; of foreign and colonial merchandize, 9,781,094*l.*; of total exports, 53,229,035*l.*; and the *real* or *declared* value of the produce and manufactures of the United Kingdom exported was 36,331,673*l.*

In the septennial period from 1827 to 1833 the same annual averages were—imports, 45,770,903*l.*; produce of United Kingdom exported, 59,724,374*l.*; foreign and colonial merchandize, 10,081,973*l.*;—total exports, 69,806,346*l.*; and the *real* or *declared* value of the produce of manufactures of the United Kingdom was 37,336,386*l.* The average *annual* increase per cent., therefore, under these several heads was—imports, 28·7 per cent.; exports of the produce of United Kingdom, 37·4 per cent.; foreign merchandize, 3 per cent. Total exports, 31·1 per cent., and *real* or *declared* value of exports of the produce and manufactures of United Kingdom only 2·8 per cent. For the year 1834 the value of the imports and exports was as follows:—Official value of imports, 49,362,811*l.*; of exports of the produce and manufactures of the United Kingdom, 73,831,550*l.*; of foreign and colonial merchandize, 11,562,036*l.*;—of total exports, 85,393,587*l.*; and of the *real* or *declared* value of the produce and manufactures of the United Kingdom, 41,649,191*l.*

Legacy Duty.

The annual legacy duty offers a very fair index of the gradual accumulation of disposable wealth. In the septennial period from 1820 to 1826 the average annual duty was 997,180*l.*, and in the septennial period from 1827 to 1833, it was 1,176,209*l.*; the average annual increase being 17·9 per cent. In the whole period of fourteen years, Government had drawn from the estates of deceased persons, 15,213,726*l.*; and supposing this to have been levied at



the rate of 4 per cent., no less a sum than 380,343,150*l.* must have been left in legacies in fourteen years. The legacy duty for 1834, ending 5th January 1835, was 1,239,012*l.*

There are further indications of the progressive increase of our trade and manufactures in the returns of the direct taxes. The increase in shopmen, warehousemen, porters, and cellarmen, from 1820 to 1826, was from 34,081 in the former year to 36,556 in the latter year; but the principal increase was between 1826 and 1832, the numbers in the last year amounting to 50,191. The absolute increase of persons so employed between 1820 and 1832 being 16,110. Clerks, book-keepers, and office-keepers, increased from 31,211 in 1820 to 44,059 in 1832; a difference of 12,848 persons; and the principal increase, as in the shopmen, &c., took place between 1826 and 1832. Stewards, bailiffs, overseers, or managers, from 9,643 in 1820 to 10,110 in 1832; the increase being 467. Travellers or riders increased from 1,664 in 1820, to 2,618 in 1832; the difference being 954. From this period it was not possible to carry the comparison further, the duty on the whole of the above persons having been repealed in 1833.

Direct Taxes.

Associated with this branch of the subject are two-wheeled carriages drawn by one horse but, as the duty on taxed carts was repealed in 1825, the increase cannot be stated with accuracy. The total number of all two-wheeled carriages paying duty in 1820 was 49,240, and in 1832 it was 65,282; but, as the duty on 19,319 of the former number was repealed in 1825, the increase has been from 29,921 to 65,282, which includes those I presume to be devoted to luxury. The following is the increase of horses connected with trade, &c.—

Two-wheeled Carriages.

	Increase.	1820.	1832.
Horses let to hire . . . . .	573	1,500	2,073
Ditto rode by farm-bailiffs . . . . .	580	858	1,438
Ditto rode by butchers where one is kept . . . . .	532	2,832	3,364
Ditto rode by butchers where two are kept . . . . .	522	691	1,213
	<u>2,207</u>	<u>5,881</u>	<u>8,088</u>

Independently of the above, in 1832, the number of horses not wholly used in labour amounted to 124,076, which, at an annual cost of 25*l.*, amounts to 3,101,900*l.*

With augmented trade there would necessarily be increased intercourse between different parts of the country, and the means for facilitating such intercourse would be provided. We accordingly see, by the returns, that public stage-coaches increased from 1,654 in 1820 to 3,146 in 1831 (for 1832 and 1833 the number is not mentioned); difference 1,492. Post-chaises, and other carriages let to hire, increased from 5,408 in 1820 to 7,363 in 1832; difference 1,955. For the septennial periods already noticed, the annual duty for stage and hackney coaches shows a progressive increase: for the first period the annual average was 327,612*l.*; and for the second period 418,460*l.*; the increase being 27·7 per cent. For 1834 the duty was 533,218*l.* The increased facilities afforded for travelling by stage-coaches has slightly affected the post-horse duty: the average annual amount for the first septennial period being 245,588*l.*; and for the second period 232,923*l.*; the decrease being 5·1 per cent. The whole result shows that the augmented means of communication by steam-boats and railways have not affected the communication by means of animal labour.

Stage Coaches.



Four-wheeled carriages drawn by one horse increased from 5,838, paying a duty of 26,271*l.*, to 13,549 in 1833, paying a duty of 60,970*l.* In the same periods stage-coachmen, guards, coachmen, grooms, postillions, and helpers, were, respectively, 2,201 and 4,062; the increase, therefore, 1,861. Waiters in taverns, coffee-houses, and lodging-houses, increased from 3,003 to 4,198; difference 1,195. Recapitulating the *increased* number of individuals employed between 1820 and 1832, in trade and manufactures, paying duty, we find—

Shopmen, warehousemen, porters, &c.	16,110
Clerks, book-keepers, &c.	12,848
Travellers and riders	954
Stewards, bailiffs, overseers, or managers	467
Stage-coachmen, &c.	1,861
Waiters in taverns, &c.	1,195
Total	33,435

Estimating the expense of the support of these persons to average 70*l.* per annum each, there must be an increased annual expenditure of 2,340,450*l.*

The duty being repealed in 1833 upon travellers or riders, clerks, book-keepers or office-keepers, stewards, bailiffs, overseers, messengers and shopmen, warehousemen, porters or cellarmen, the total number of persons so employed cannot be given after 1832. In that year they amounted to—

Travellers, &c.	2,618
Clerks, &c.	44,059
Stewards, bailiffs, &c.	10,110
Shopmen, &c.	50,191
Waiters	4,198
Stage-coachmen, &c.	2,720
Coachmen let to hire	1,342
	115,238

Servants.

The total number of 226,479 male servants assessed in that year is made up as follows:—91,337 kept by persons not bachelors; 12,044 kept by bachelors; extra servants 1,766, employer charged for carriage; ditto 5,515, employer not charged for carriage; 579 under-gamekeepers; and 115,238 travellers, &c.

Before quitting this part of the subject it may be stated, that in 1820 there were 983,711 horses employed in labour charged to the duty; but as most of the duties were subsequently repealed, with the exception of that on horses not wholly used in husbandry, the total number in 1832 cannot be correctly given: but it appears in 1833 there were exempted from duty 645,959.

Houses and  
Rental.

In 1822 the total number of inhabited houses in *Great Britain*, assessed at a rental above 10*l.* per annum, was 349,945, the rental of which was 10,152,864*l.* This was exclusive of 162,007 houses assessed at less than 10*l.*, the rental of which was 1,035,384. In 1832 the number of houses was 443,090, and the rental 12,629,980*l.* The tax on houses under 10*l.* rental being repealed in 1825, such houses are, of course, not in-



cluded. The increase in the number of inhabited houses with a rental above 10*l.* was 93,145 between 1822 and 1832, and the increased rental was 2,477,116*l.* Supposing the houses with a rental under 10*l.* not to have increased since 1822, which is quite impossible, the total number of houses in Great Britain in 1832 would be 605,017, and the rental 13,665,364*l.*, which, at fifteen years' purchase, would indicate a capital of 204,980,460*l.* being invested in houses.

With such indications of increasing wealth in the condition of the better classes of society, it is an important and interesting inquiry how far it is shared by that portion of the people a few steps lower down in the social scale. If we turn to Mr. Pratt's book on Savings' Banks, and look upon it as a mirror reflecting in some degree the pecuniary means of the humbler classes, we shall find that amongst them also accumulation of capital appears to be taking place; small, certainly, in individual proprietary, but vastly great in the aggregate.

Between the 20th November, 1831, and 20th November, 1834, the number of depositors in Great Britain and Ireland increased 86,990, and the additional amount deposited was 1,862,319*l.* The total number of depositors in all the banks was 499,207, and the amount belonging to these parties was 15,369,884*l.* Between 1831 and 1832 deposits ceased, indeed retrograded in England and Wales, but with this exception, the increase within the above period in depositors amounted to 17·9, and in deposits 10·4 per cent.; and unaccustomed as we are to hear of any amelioration in anything connected with Ireland, it is no small satisfaction to see that there has been a steady and unchecked increase in depositors and deposits; that the increase in the depositors in the savings' banks in Ireland was from 34,201 in 1831 to 53,179 in 1834, or 55·4 per cent., and the deposits from 905,056*l.* to 1,450,766*l.*, or 60·2 per cent., within the above period. The average of individual deposits in England and Wales is 31*l.* 2*s.*, and for Ireland 27*l.* 2*s.*

Referring to the wages of agricultural labour not averaging 5*d.* per diem for all Ireland, agreeably to Mr. Inglis, to the very high rent of land, the limited retail trade, the comparatively low wages of domestic servants, and to the comparatively small capital actively employed, this indication of surplus means in a portion of the humbler classes in Ireland cannot fail to attract attention\*.

The increase in the population of Great Britain from 1821 to 1831 has been 14·9 per cent., from 14,391,631 to 16,537,398; and for the entire population of Great Britain and Ireland the increase has been somewhat less, viz. 14·5 per cent., from 21,193,458 to 24,271,763. The increase in Ireland has been 14·2 per cent., from 6,801,827 to 7,767,401. The average proportion of taxes and duties per head in 1821 was 2*l.* 12*s.* 8*d.*, and in 1831 it was 1*l.* 18*s.* 3*d.* If the returns are to be relied upon, it would appear that the proportions of the population of *Great Britain* engaged in agriculture, trade, and manufactures, have lessened in the decennial periods 1811, 1821, and 1831, respectively, and the proportions not accounted for under these heads have increased.

\* From the speech of the Chancellor of the Exchequer in the House of Commons, on the 6th May, 1836, it would appear that the total amount of deposits on the 20th November, 1835, was 16,421,605*l.*; the increase on the year being 990,701*l.* or about 6 per cent., and the increase in the number of depositors was 35,528, or about 7 per cent.



Periods.		Agriculture.	Trade, &c.	Others.
England .	1811	34·7	45·9	19·4
	1821	33·0	47·6	19·4
	1831	27·7	43·1	29·2
Wales . .	1811	56·2	27·7	16·1
	1821	50·6	28·5	20·9
	1831	43·9	26·9	29·2
Scotland .	1811	31·3	42·1	26·6
	1821	29·2	42·5	28·3
	1831	25·2	41·3	33·5

In Ireland, in 1821, in 2,836,815 persons, whose occupations were returned, 40·1 per cent. were engaged in agriculture, 41·2 per cent. in trade and manufactures, and 18·7 per cent. were otherwise occupied. In the census of 1831, in 1,385,057 FAMILIES, whose occupations were returned, 63·8 per cent. were employed in agriculture, 18 per cent. in trade, and 18·2 in other occupations. This has much more the character of truth than the former return. In 1821 the proportion of the population under five years of age was 15·3 per cent., and under 10 years of age 28·8 per cent. of the whole population. In the same year, in Great Britain, the proportion under five years of age was 12·8 per cent., and under ten years of age 24·1 per cent. of the whole population.

Paupers.

But we must now turn to the less flattering side of the picture. The increased wealth of the country has not diminished the number of paupers receiving relief, and the expenditure in the poor-rates in the same period is seen to be an unmitigated burthen. In 1821 the actual expenditure for the poor in England and Wales was 6,959,249*l.*, and in 1831 it was 6,798,888*l.*; but the total expenditure for 1831 was 8,339,087*l.* In 1832 the total sum expended was 8,683,461*l.*, of which 7,036,968*l.* was for the relief of the poor, the rest being wasted in law-suits\*, &c. &c. In 1833 it was 8,739,881*l.*, and in 1834 it was 8,289,348*l.*

Crime.

Another feature of a discouraging nature is the disproportionate increase of crime beyond the increase of the population and the increase of pauperism. In 1821 the commitments in England and Wales were 13,115, in 1825 they were 14,437, and in 1832 they were 20,829; the increase being on 1821 no less than 58·8 per cent. In 1813 the commitments were only

\* From the speech of the Chancellor of the Exchequer in the House of Commons, on the 6th May, 1836, we are led to believe that this evil is in progress of amelioration under the operation of the New Poor-Law Bill. From returns furnished to him on an averaged annual expenditure of 1,258,867*l.* in certain districts, a reduction of 49*l.* per cent. had been effected.



7,164. The total number committed for the septennial period ending 1826 was 95,628, and the total number for the septennial period ending 1833 was 131,818; the increase being 35,190, or 36·8 per cent. In 1821 the commitments to the population were 1 in 866 persons\*, and in 1831 they were 1 in 686 persons.

The last discouraging feature is the increased consumption of spirits. For the first septennial period before noticed the annual average consumption of spirits was 16,558,241 gallons, including foreign and colonial spirits; and the annual average population was 21,935,225 souls: deducting 24 per cent. of this number for children under ten years of age, and who may be supposed not to touch spirits, the consumption was within a fraction (0·99) of a gallon per head per annum. Pursuing the same process for the last septennial period, we have an annual average quantity of spirits (including foreign and colonial) consumed, of 26,822,731 gallons, by an annual average population of 22,973,699 souls, minus 24 per cent. for children under ten years of age; the average annual consumption thus rose to 1·53 gallons per head or 54·5 per cent.

Consumption  
of Spirits.

As a matter of curious *speculation*, we may offer an *approximate* estimate of the annual expense incurred in the support of some of the matters of luxury previously detailed:—

	Annual Cost. in 1832-3.	Total of each General Head.
<i>Horses</i> —Deducting 49,660 horses for the carriages paying duty in 1832, there remain 133,218 riding-horses at £40 each annual cost =	£5,328,720	
997 race-horses, at £40 each	39,880	
24,899 horses under 13 hands, for riding or drawing carriages, at £30 per annum cost each	746,970	
<i>Game Certificates</i> —40,783, paying a duty of	141,933	
<i>Hair Powder</i> —paying a duty of	11,001	
<i>Armorial Bearings</i> —29,139, duty	59,758	
<i>Carriages</i> —24,830, at £250 per annum each, horses, coachman, footman, and duty included = to annual expenditure of	6,207,500	
47,250 two-wheeled carriages, paying a duty of	153,562	
<i>Male Domestic Servants</i> —103,381 in 1832, less 49,660 deducted as coachmen and footmen charged in the cost of keeping a carriage, leaving 53,721, at £70 per annum each = to yearly cost of	3,760,470	
<i>Dogs</i> —337,951 dogs at £1 per annum each cost, and duty £176,579: total	514,530	
Duty on 77 packs of hounds	2,772	
		£16,967,096

\* For the year 1835 the proportion committed for trial was one in 631 of the whole population; but in Bristol city we find the startling proportion of 1 in 274, and in Middlesex 1 in 395. In Merioneth only 1 in 8,289; and, with some exceptions, the Welsh and northern counties have a low scale of commitments.



It is thus seen that the luxury of horses, carriages, armorial bearings, and male servants, gamekeepers, dogs, &c. &c., involved an annual expenditure of 16,967,096*l.*, and in the present year (1836) it is considerably more.

*Recapitulation of Estimate of increased Expense, between 1820 and 1832-3.*

<i>Luxury—Total Increase.</i>	Increase in 1832-3, beyond 1820. £.	Total of each General Head. £.
Saddle-horses 4,541, at 40 <i>l.</i> each . . . . .	181,640	
16,200 horses under 13 hands, used for riding or drawing carriages, at 30 <i>l.</i> each . . . . .	486,000	
7,489 four-wheeled private carriages, including 14,978 coachmen, and footmen, horses, duty, &c., at 250 <i>l.</i> each . . . . .	1,872,250	
18,029 two-wheeled carriages, the annual duty being . . . . .	58,805	
4,519 male domestic servants, at 70 <i>l.</i> each . . . . .	316,330	
7,117 armorial-bearings duty, each 2 <i>l.</i> 8 <i>s.</i> . . . . .	17,080	
Dogs, difference of duty between 1820 and 1832 . . . . .	7,332	
Keep of 25,640 dogs, difference between 312,311 in 1820 and 337,951 in 1832, at 1 <i>l.</i> each . . . . .	25,640	
323 Race-horses, at 40 <i>l.</i> each . . . . .	12,920	
Increased annual Expenditure in Luxury . . . . .		2,977,997
<i>Excise Luxury—Average Annual Increase.</i>		
5,787,550 lbs. of tea, at 4 <i>s.</i> per lb. . . . .	1,157,510	
11,418,133 lbs. of coffee, at 110 <i>s.</i> average per cwt. . . . .	560,708	
442,983 cwt. of sugar, at 64 <i>s.</i> 6 <i>d.</i> average per cwt. . . . .	1,428,620	
2,438,696 lbs. of snuff and tobacco, at 3 <i>s.</i> 6 <i>d.</i> per lb. . . . .	426,771	
8,830,983 gallons of British spirits, at 8 <i>s.</i> 6 <i>d.</i> per gallon. . . . .	3,753,167	
89,872 barrels of ale and beer, at 13 <i>s.</i> 6 <i>d.</i> per barrel . . . . .	60,663	
976,807 gallons of wines of all sorts, at 11 <i>s.</i> per gallon. . . . .	537,243	
22,539,521 lbs. of soap, at 45 <i>s.</i> per cwt. . . . .	452,804	
Average annual increase in articles almost of Luxury . . . . .		8,377,486
93,145 inhabited houses, increased rental . . . . .		2,477,116
Increase in deposits in savings' banks, 1831 to 1834 . . . . .		1,862,319
<i>Increase in Trade, Manufactures, &amp;c. &amp;c.</i>		
Postage, from 1820 to 1833, from a net revenue of 1,479,547 <i>l.</i> to 1,553,425 <i>l.</i> . . . . .	73,878	
Stamps, ditto ditto, from 6,564,461 <i>l.</i> to 7,072,108 <i>l.</i> . . . . .	507,647	
Legacy duty, average annual increase, in septennial periods . . . . .	179,029	
106,429,130 lbs. of cotton, at 8 <i>d.</i> per lb., average annual increase . . . . .	3,547,637	
9,922,122 lbs. of wool imported, at 1 <i>s.</i> 6 <i>d.</i> per lb., ditto . . . . .	744,159	
2,071,794 lbs. of silk, at 16 <i>s.</i> per lb. . . . . ditto . . . . .	1,657,435	
310,725 cwt. of flax, at 42 <i>s.</i> per cwt. . . . .	652,522	
3,115 tons of iron, at 8 <i>l.</i> per ton . . . . .	24,920	
239,438 lbs. of indigo, at 6 <i>s.</i> 4 <i>d.</i> per lb. . . . .	75,822	
122,361 lbs. of lac dye, at 6 <i>l.</i> per cwt. . . . .	6,552	
538,073 lbs. of castor oil, at 1 <i>s.</i> 8 <i>d.</i> per lb. . . . .	44,839	
1,289,968 gallons of olive oil, at 8 <i>s.</i> per gallon . . . . .	515,987	
Carried forward . . . . .	£8,030,427	£15,694,918



	Increase in 1832-3, beyond 1820. £.	Total of each General Head. £.
Brought forward . . . . .	8,030,427	15,694,918
Increased value of manufactured iron (hardware and cutlery) exported between 1820 and 1834 . . . . .	536,148	
331 ships, and 73,471 tons, average annual increase between 1827 and 1834, inclusive, at 10 <i>l.</i> per ton . . . . .	734,710	
33,435 shopmen, warehousemen, &c. &c., at 70 <i>l.</i> each annually 2,207 butchers' and bailiffs' horses, at 25 <i>l.</i> each, ditto . . . . .	2,340,450 55,175	
Average annual increase of stage-coach duty, for septennial periods . . . . .	90,848	
Annual increase in trade, &c. . . . .	. . .	11,787,758
Total increase in articles of Luxury, Excise } Luxury, Trade, &c. . . . . }	. . .	£ 27,482,676

*Approximate Estimate of Value of articles of Luxury.*

	£.	£.
997 race-horses, at 150 <i>l.</i> each . . . . .	149,550	
24,899 horses, under 13 hands, for riding or drawing carriages, at 25 <i>l.</i> each . . . . .	622,475	
49,660 carriage-horses at 60 <i>l.</i> each . . . . .	2,979,600	
337,951 dogs at 1 <i>l.</i> each . . . . .	337,951	
133,218 riding-horses, at 30 <i>l.</i> each . . . . .	3,996,540	
24,830 four-wheeled carriages, at 100 <i>l.</i> each . . . . .	2,483,000	
47,250 two-wheeled carriages, at 40 <i>l.</i> each . . . . .	1,890,000	
Value of articles of Luxury . . . . .	. . .	12,459,116
12,004,565 lbs. spices* . . . . .	1,948,154	
33,643,980 lbs. of tea, at 4 <i>s.</i> per lb. . . . .	6,728,796	
41,865,111 lbs. of coffee, at 110 <i>s.</i> per cwt. . . . .	2,055,878	
4,743,414 cwts. of sugar, at 64 <i>s.</i> 6 <i>d.</i> per cwt. . . . .	15,297,101	
39,477,907 lbs. of snuff and tobacco, at 3 <i>s.</i> 6 <i>d.</i> per lb. . . . .	6,908,633	
23,397,806 gallons of British spirits, at 8 <i>s.</i> 6 <i>d.</i> per gallon . . . . .	9,944,067	
7,832,899 barrels of ale and beer, at 13 <i>s.</i> 6 <i>d.</i> per barrel . . . . .	5,287,206	
9,766,116 gallons of wines, at 1 <i>l.</i> per gallon . . . . .	5,371,363	
154,745,324 lbs. of soap, at 45 <i>s.</i> per cwt. . . . .	3,108,725	
8,722,815 gallons of rum 5,158,489 gallons, at 12 <i>s.</i> . . . . .	3,095,093	
foreign spirits { brandy, &c., 3,564,326 gallons, at 28 <i>s.</i> . . . . .	4,990,056	
† Value of articles almost of Luxury . . . . .	. . .	64,735,072
326,875,425 lbs. of cotton, at 8 <i>d.</i> per lb., retained for con- sumption . . . . .	10,895,847	
46,455,232 lbs. of wool, at 1 <i>s.</i> 6 <i>d.</i> per lb. . . . .	3,484,142	
3,643,512 lbs. of silk, at 16 <i>s.</i> per lb. . . . .	2,914,809	
811,722 cwts. of flax, at 42 <i>s.</i> per cwt. . . . .	1,704,616	
16,215 tons of iron, at 8 <i>l.</i> per ton . . . . .	129,720	
Carried forward . . . . .	19,129,134	

\* Cassia Lignia at 1*s.*, cinnamon 8*s.* 6*d.*, cloves 3*s.* 4*d.*, mace 10*s.* 6*d.*, nutmegs 9*s.* 6*d.*, pepper 1*s.* 4*d.*, and pimento at 10*d.* per lb., ginger at 9*d.* per cwt.

† The quantities of articles "almost of Luxury," and in "Trade and Manufactures," are extracted from the returns for 1834, excepting ale and beer.



	£.	£.
Brought forward . . . . .	19,129,134	
4,155,296 lbs. of Indigo, at 6s. 4d. per lb. . . . .	1,315,843	
2,318,142 gallons of olive-oil, at 8s. per gallon . . . . .	927,256	
694,375 lbs. of castor-oil, at 1s. 8d. per lb. . . . .	57,864	
708,959 lbs. of lac dye, at 6l. per cwt. . . . .	37,980	
25,055 ships of United Kingdom of 2,716,100 tons, at 10l. per ton . . . . .	27,161,000	
† 115,238 shopmen, clerks, warehousemen, waiters, &c., at 70l. per annum . . . . .	8,066,660	
Value of 7,828 horses let to hire, butchers' horses, &c., 20l. each . . . . .	156,560	
do. 121,043 horses not wholly used in agriculture, 20l. each . . . . .	2,420,860	
do. 645,959 value of horses used in agriculture not charged to duty, 20l. each . . . . .	12,919,180	
Embarked in the <i>chief</i> articles of Trade and Manufactures &c. &c.* . . . .		72,192,337
605,097 houses in United Kingdom with a rental of 13,665,364l., at 15 years' purchase . . . . .		204,980,460
Amount of deposits in savings' banks by 499,207 depositors . . . . .		15,369,884
Auctions, amount of sales charged with duty . . . . .		7,331,892

Many other instances might have been adduced, but it was thought it would swell this paper to too great a length.

With respect to increased capital devoted to luxury or trade, it will be borne in mind that the remission of taxes to a large amount has permitted wealth to flow into new channels.

In estimating the value of articles of trade, &c., it will be seen that I have purposely taken a low price.

It has been my object in the above paper to give a practical illustration of the facilities which the Statistical Society and that admirable and ably-conducted institution, the statistical department of the Board of Trade, afford to any individual to collate facts, with a view to show the actual state and past changes in the condition of society. The Statistical Society, in each succeeding year, may thus hope to accumulate facts, and facts only; and it is for its members, or others who choose to take the trouble, to reason upon them. The complaints of branches of industry can be subjected at once to the *experimentum crucis*, and it can be determined from the returns of the present and past state of any branch of industry whether the pressure be of a general or local nature, or not existing at all, and thus the great ends of truth will be advanced, and data afforded for safe legislation.

\* Independently of the value of machinery, buildings, &c. &c.

† In 1832.



A STATISTICAL VIEW  
OF THE  
BIRTHS AND DEATHS IN THE PRUSSIAN STATES,  
IN THE FIFTEEN YEARS FROM 1820 TO 1834\*,

COMPILED BY  
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In the Prussian States (with the exception of Neufchatel, and of the Principality of Lichtenberg, which was acquired only in the course of the year 1834,) there were born—

In the Years	Males.	Females.	Total.
1820	249,203	235,193	484,398
1821	259,710	244,450	504,160
1822	258,523	244,439	502,962
1820-22	767,438	724,082	1,491,520
1823	256,773	241,913	498,686
1824	260,134	245,204	505,338
1825	268,921	254,732	523,653
1823-25	785,828	741,849	1,527,677
1826	269,917	255,706	525,623
1827	252,337	238,338	490,675
1828	257,396	242,111	499,507
1826-28	779,650	736,155	1,515,805
1829	255,208	240,275	495,483
1830	255,562	241,679	497,241
1831	252,164	238,398	490,562
1829-31	762,934	720,352	1,483,286
1832	248,259	233,714	481,973
1833	276,940	260,534	537,474
1834	285,495	269,787	555,282
1832-34	810,694	764,035	1,574,729
In the 15 years . . .	3,906,544	3,686,473	7,593,017

\* Published in the 44th and 45th numbers of the MEDICINISCHE ZEITUNG (Medical Journal), on the 4th and 11th of November, 1835.



There died,—

In the Years	Males.	Females.	Total.
1820	152,049	144,860	296,909
1821	148,023	139,550	287,573
1822	161,252	153,272	314,524
1820-22	461,324	437,682	899,006
1823	164,181	154,718	318,899
1824	163,529	154,991	318,520
1825	168,941	158,413	327,354
1823-25	496,651	468,122	964,773
1826	183,022	172,110	355,132
1827	189,783	175,802	365,585
1828	192,389	180,491	372,880
1826-28	565,194	528,403	1,093,597
1829	199,608	188,647	388,255
1830	202,075	188,627	390,702
1831	240,342	222,323	462,665
1829-31	642,025	599,597	1,241,622
1832	218,252	202,876	421,128
1833	213,188	200,706	413,894
1834	218,108	205,081	423,189
1832-34	649,548	608,663	1,258,211
In the 15 years . . .	2,814,742	2,642,467	5,457,209

The number of the inhabitants has been taken at the beginning and at the end of each of the triennial periods here noted. The arithmetical mean of each pair of numberings gives, as the average number of the inhabitants, for the years—

1820, 21 and 22	11,374,563
1823, 24 and 25	11,960,429
1826, 27 and 28	12,491,417
1829, 30 and 31	12,882,535
1832, 33 and 34	13,256,867

If we compare these average numbers with the number of births and deaths in the corresponding triennial periods, it will be seen that, on an average of 1,000,000 living contemporaneously, there were annually—

In the Years	Born.	Died.
1820-22	43,709	26,346
1823-25	42,576	26,888
1826-28	40,449	29,183
1829-31	38,380	32,127
1832-34	39,595	31,637

The mortality has thus considerably *increased*; the procreation, though less considerably,



has *decreased*. However, the last triennial period of the series is, in both respects, somewhat though not much more favourable than the one immediately preceding. In the years 1820 to 1822 there was, on an average, 1 born to very near 23 living; and there died 1 in nearly 38: but, in the years 1829 to 1831, there was, on an average, 1 born to 26 living; and there died 1 in something more than 31. The proportion of the living to those who were born, and to those who died, is given in these statements much too superficially for scientific uses; but, as this mode of general expression readily impresses the imagination and memory, it is convenient for the great mass of readers who require only a cursory view of the subject.

It has long been known that there are more males born than females. In the Prussian States this fact is verified by experience; and indeed so invariably, with regard to the whole number of the above-stated births, that, in the period of 15 years, from 1820 to 1834, the excess of males has been never below  $5\frac{1}{2}$  per cent., and once above  $6\frac{1}{2}$  per cent. For instance there were born, on an average, for 10,000 females—

In the Years	Males.	In the Years	Males.	In the Years	Males.
1820	10,596	1825	10,557	1830	10,574
1821	10,624	1826	10,556	1831	10,577
1822	10,576	1827	10,587	1832	10,622
1823	10,614	1828	10,631	1833	10,630
1824	10,609	1829	10,622	1834	10,582

The total number of males and females born in this period of 15 years exhibits the proportion of 10,597 males to 10,000 females; so that, on an average, very nearly 106 males were born for 100 females. The commonly-received proportion of 21 males to 20 females, or 105 to 100, appears therefore, in the Prussian State, and at the present time, somewhat too small. The cause of the variation of the proportion in the single years has hitherto not been ascertained: still, it would appear that this fact is not wholly assignable to mere accident. However, it is worthy of remark that, in the births *out* of wedlock, the excess of males above females is less than the births *in* wedlock. The number, for instance, of children born in Prussia out of wedlock was—

In the Years	Males.	Females.	Total.
1820	17,170	16,705	33,875
1821	18,060	17,510	35,570
1822	18,260	18,028	36,288
1820-22	53,490	52,243	105,733
1823	18,078	17,247	35,325
1824	17,859	17,300	35,159
1825	18,677	18,256	36,933
1823-25	54,614	52,803	107,417
1826	18,621	18,292	36,913
1827	16,957	16,445	33,402
1828	16,433	15,826	32,259
1826-28	52,011	50,563	102,574



## A STATISTICAL VIEW OF THE BIRTHS AND DEATHS

In the Years	Males.	Females.	Total.
1829	16,262	15,675	31,937
1830	16,965	16,295	33,260
1831	17,897	17,209	35,106
1829-31	51,124	49,179	100,303
1832	16,459	15,799	32,258
1833	18,919	18,632	37,551
1834	20,641	20,015	40,656
1832-34	56,019	54,446	110,465
In the 15 years	267,258	259,234	526,492

By comparing the total numbers of each sex, it appears that, of illegitimate children there were born, for 10,000 females, not quite 10,310 males. The excess of males is here only half as great as it is in the whole number of births taken together. That this is a fact not merely accidental is shown by the following comparison of the single years. Of illegitimate children there were, for instance, born, on an average, for 10,000 females—

In the Years	Males.	In the Years	Males.	In the Years	Males.
1820	10,279	1825	10,231	1830	10,411
1821	10,314	1826	10,180	1831	10,400
1822	10,129	1827	10,312	1832	10,418
1823	10,483	1828	10,383	1833	10,154
1824	10,323	1829	10,375	1834	10,313

Here the proportion of males varies very much more than in the whole number of births considered collectively, because the numbers from which the account is formed are not sufficiently large to exclude casualties to a similar degree: but every ratio here exhibited lies between 10,129 and 10,483; and the larger of these two is considerably under the lowest for the whole number of births, which is 10,556.

After deducting the number of illegitimate children from the whole number born in these 15 years, the remaining legitimate children born in this period are,—

Males . . . .	3,850,525
Females . . . .	3,632,027
Total . . . .	7,482,552

and the proportion of the sexes in this legitimate class is nearly 10,602 males to 10,000 females. This proportion differs so trivially from that already shown in the foregoing account of the total births that, it is not necessary to proceed with the comparison of sex in the legitimate births throughout each separate annual period.

Another fact, no less worthy of remark, is the disproportion of sexes in the children of Jews. Among these people the excess of male children born is very much larger (presuming the official reports to be correct) than it is on the average of the whole number of births.



In the 15 years from 1820 to 1834 there were born among the Jews in the Prussian States,—

Males . . . . 44,348

Females . . . . 39,877

Total . . 84,225 children;

which, on an average, is 11,121 males for 10,000 females. In the single years the proportion varies very considerably. The following Table exhibits the annual births of the whole Jewish population of the Prussian States. There were born—

In the Years	Males.	Females.	Total.
1820	2,921	2,598	5,519
1821	2,974	2,477	5,451
1822	2,891	2,525	5,416
1820-22	8,786	7,600	16,386
1823	2,698	2,448	5,146
1824	2,923	2,638	5,561
1825	3,010	2,618	5,628
1823-25	8,631	7,704	16,335
1826	3,060	2,787	5,847
1827	2,894	2,588	5,482
1828	2,888	2,671	5,559
1826-28	8,842	8,046	16,888
1829	2,879	2,575	5,454
1830	2,898	2,725	5,623
1831	2,984	2,592	5,576
1829-31	8,761	7,892	16,653
1832	2,918	2,668	5,586
1833	3,124	2,905	6,029
1834	3,286	3,062	6,348
1832-34	9,328	8,635	17,963
In the 15 years . . . .	44,348	39,877	84,225

The above-stated numbers for the single years are too small to enable us to elicit, by comparing them, any useful knowledge of the actual proportion of the sexes. Even the total numbers for the triennial periods present very widely-differing proportions: still, it is clear that, in each of these separate periods, the excess of males born among the Jews was considerably greater than in the births of the whole inhabitants. Thus for 10,000 females the number of males born was—

In the Triennial Periods.	Among the whole Inhabitants.	Among the Illegitimate.	Among the Jewish Population.
1820 to 1822	10,599	10,239	11,561
1823 to 1825	10,593	10,343	11,203
1826 to 1827	10,591	10,287	10,989
1829 to 1831	10,591	10,395	11,101
1832 to 1834	10,611	10,289	10,803
Average for the 15 years . . . .	10,597	10,310	11,121



Now, whatever may be the still undiscovered circumstances by which the determination of the sex of the offspring is influenced, it is obvious, at all events, that the peculiar circumstances under which illicit connection is usually accomplished must have a tendency contrary to that of the peculiar circumstances from which the greatly superior propagating power of the Jews arises; inasmuch as the former diminish the excess of male children, while the latter increase it. By the female sex the prejudicial consequences of illicit connection are much more severely felt than by the male sex: and, from the habits of society, they have much greater motive for guarding themselves from it. It hence appears that the excess of inclination to indulge in this connection is usually on the side of the woman; though there are assuredly to be found many exceptions to the rule. On the other hand, among the purposes which may have originated the ancient practice of circumcision, one is said (though with what reason it may indeed be doubted,) to have been the producing an increase of physical energy. Admitting the validity of these two propositions, the foregoing deduction of facts would incline us to adopt the theory which attributes the sex of the child to the excess of excitation on the part of the man or the woman.—The author of the present paper attaches a value to these suggestions only inasmuch as they involve a necessity for the discovery of a more satisfactory reason for a remarkable phenomenon which, at all events, is not merely accidental.

In the Prussian States the births producing *two or more at once* have been separately registered only since the year 1826. The following is a tabular view of them, throughout the nine years from 1826 to 1834. There were—

In the Years	Births producing 1.	Births producing 2.	Births producing 3.	Births producing 4.
1826	513,727	5,824	80	2
1827	479,708	5,376	69	2
1828	488,060	5,620	69	0
1826-28	1,481,495	16,820	218	4
1829	483,796	5,738	69	1
1830	486,144	5,455	61	1
1831	479,281	5,543	65	0
1829-31	1,449,221	16,736	195	2
1832	470,175	5,783	76	1
1833	524,525	6,340	87	2
1834	541,615	6,705	83	2
1832-34	1,536,315	18,828	246	5
Total in the 9 years	4,467,031	52,384	659	11

The number of children born was, therefore,—

Births.	Children.
4,467,031 . . producing . . 1 . .	4,467,031
52,384 . . „ . . 2 . .	104,768
659 . . „ . . 3 . .	1,977
11 . . „ . . 4 . .	44
Total . . . 4,520,085	4,573,820



Separately,—

In the Years	Births.	Children.
1826	519,633	525,623
1827	485,155	490,675
1828	493,749	499,507
1826-28	1,498,537	1,515,805
1829	489,604	495,483
1830	491,661	497,241
1831	484,889	490,562
1829-31	1,466,154	1,483,286
1832	476,035	481,973
1833	530,954	537,474
1834	548,405	555,282
1832-34	1,555,394	1,574,729

That is, 10,000 births produced—

In the Year	Children.
1826	10,115
1827	10,114
1828	10,129
1829	10,120
1830	10,114
1831	10,117
1832	10,125
1833	10,123
1834	10,125

On an average in the whole 9 years . . . 10,119

These proportions are remarkably similar; and hence it appears that births of this class are produced by causes which are almost wholly independent of fluctuating external influences. The difference between 10,114 and 10,129 is indeed so small that, until a longer period of observation shall have furnished more positive knowledge, it may be regarded as merely an accidental variation. Hitherto, no constant variation has been occasioned in the years that have been very hot or very cold, very wet or very dry, very healthy or very sickly.

With regard to the increase of population, the births producing a plurality of children are of little importance; as the children they contribute to the whole number born are only about 12 in 1,000; and apparently, in their first years, they are subject to a greater mortality than those of the single births.

In the nine years, 1826 to 1834, the births producing two at once gave—

17,327 pairs of males.

15,888 pairs of females.

Total 33,215 pairs of similar sex.

19,169 pairs of dissimilar sex.

Total of twins born 52,384



Thus nearly seven-elevenths of the whole were pairs of *like* sex, and four-elevenths only were pairs of *unlike* sex. The proportion between the two sexes differs but slightly from that presented by the total births; there having been born, on an average, for 10,000 females, 10,564 males; while the average on the total births gives the proportion of 10,000 to 10,597. Whether this small difference be not entirely owing to accident more extended observations must determine.

The number of births producing three at once is too small, and the difference in the proportion of the sexes of the children in the separate triennial periods is too great, to admit of the forming of any useful deductions from an average proportion. However, for the sake of information, it may be remarked that, of the above-stated births of three at once,—

140	births	produced	each	3	males,
195	„	„	„	2	males and 1 female,
167	„	„	„	1	male and 2 females,
143	„	„	„	3	females,
and of 14 the sex of the children was not reported.					

Total 659 (the above-stated number.)

The 645 births of three at once, of which the sex of the children was ascertained, produced—

977 males.

958 females.

Total 1,935 children.

The excess of males above females is here a little under 2 per cent.

The births producing four at once consisted of—

1 of 4 males.

1 of 3 males and 1 female.

4 of 2 males and 2 females.

2 of 1 male and 3 females.

3 of 4 females.

Births 11

There were thus produced, by these 11 births, 17 males and 27 females. It is needless to remark that, out of these so *fortunately few* cases, no available deduction can be made.

Until the evidence of further observations is obtained, it may, in the mean time, be noticed that, throughout this period of nine years, the excess of males in the births of two at once was a little less than in the total births; and that, in the births of three at once, it was still more diminished; while in those of four at once it altogether disappeared. Should this gradual diminution of the excess of males be regarded as merely accidental?

From the consideration of the numbers who have died we proceed next to the age they attained, and to the causes of their death.

The age attained is, for the most part, reported correctly; and illusion can seldom be occasioned, except in cases where these reports are relied on for ascertaining exactly to a single year the extent of a life of *unusual* length. Among the uneducated classes very old people



have in most cases forgotten the year of their birth; and the natural desire to attract notice, as instances of longevity, occasions exaggerated statements, when no one of about the same age is living in the neighbourhood who might exhibit the truth of the statement. Hence then, greatly interesting as it is, for the promotion of the Natural History of Man, to register cases of extreme old age, the Statistical Bureau of Prussia does not insist upon any great exactitude in reporting the ages of those who have died beyond the 90th year; as inaccurate and uncertain information in such cases can serve only to mislead and occasion fallacious conclusions. With regard to the *living*, there are doubtless many false statements of age presented for numerous purposes, in the years between 15 and 60; but with regard to the *dead*, all occasion for similar deception is at an end: and there are commonly among the acquaintances of the deceased some persons who are always ready to rectify any erroneous statement of the age they attained. Even with regard to the corpses of unknown individuals, the estimate cannot easily be erroneous, at any rate not sufficiently so as to have any positive influence upon the following general exposition.

The total number of persons who died in the Prussian States, in the 15 years from 1820 to 1834, was officially registered according to the following scale of ages:—

	Males.	Females.	Total.
Died before or in the Birth, and } therefore were born dead	147,705	109,363	257,068
Died in the 1st year . . . . .	715,284	581,540	1,296,824
2d and 3d year . . . . .	317,934	300,630	618,564
4th and 5th year . . . . .	129,390	125,919	255,309
6th and 7th year . . . . .	73,331	70,970	144,301
8th, 9th and 10th year . . . . .	65,161	62,932	128,093
11th, 12th, 13th and 14th year . . . . .	50,559	50,460	101,019
15th to the 20th year . . . . .	67,880	64,449	132,329
21st to the 25th year . . . . .	81,096	64,184	145,280
26th to the 30th year . . . . .	67,494	72,989	140,483
31st to the 35th year . . . . .	64,714	77,224	141,938
36th to the 40th year . . . . .	68,725	83,167	151,892
41st to the 45th year . . . . .	80,497	86,343	166,840
46th to the 50th year . . . . .	91,213	85,129	176,342
51st to the 55th year . . . . .	104,898	97,987	202,885
56th to the 60th year . . . . .	113,184	107,556	220,740
61st to the 65th year . . . . .	135,108	140,052	275,160
66th to the 70th year . . . . .	125,620	130,840	256,460
71st to the 75th year . . . . .	119,016	127,355	246,371
76th to the 80th year . . . . .	94,777	96,935	191,712
81st to the 85th year . . . . .	61,148	63,369	124,517
86th to the 90th year . . . . .	27,556	28,950	56,506
Died after the 90th year . . . . .	12,452	14,124	26,576
Total of all ages . . . . .	2,814,742	2,642,467	5,457,209



It appears, therefore, that there died before the completion of their—

	Males.	Females.	Total.
3d year . . . . .	1,180,923	991,533	2,172,456
7th year . . . . .	202,721	196,889	399,610
14th year . . . . .	115,720	113,392	229,112
25th year . . . . .	148,976	128,633	277,609
45th year . . . . .	281,430	319,723	601,153
60th year . . . . .	309,295	290,672	599,967
80th year . . . . .	474,521	495,182	969,703
After completing their 80th year .	101,156	106,443	207,599
Total, as above . . . . .	2,814,742	2,642,467	5,457,209

Hence the following average proportions of deaths at each age : of 1,000,000, who died in the 15 years from 1820 to 1834, there were—

	Males.	Females.	Total.
Born dead . . . . .	27,066	20,040	47,106
Died in their 1st year . . . . .	131,071	106,564	237,635
2d and 3d year . . . . .	58,260	55,088	113,348
4th and 5th year . . . . .	23,710	23,074	46,784
6th and 7th year . . . . .	13,438	13,005	26,443
8th, 9th, and 10th year . . . .	11,940	11,532	23,472
11th, 12th, 13th, and 14th year	9,256	9,246	18,511
15th to the 20th year . . . . .	12,439	11,810	24,249
21st to the 25th year . . . . .	14,860	11,761	26,621
26th to the 30th year . . . . .	12,368	13,375	25,743
31st to the 35th year . . . . .	11,858	14,151	26,009
36th to the 40th year . . . . .	12,594	15,239	27,833
41st to the 45th year . . . . .	14,751	15,822	30,573
46th to the 50th year . . . . .	16,714	15,599	32,313
51st to the 55th year . . . . .	19,222	17,956	37,178
56th to the 60th year . . . . .	20,740	19,709	40,449
61st to the 65th year . . . . .	24,757	25,664	50,421
66th to the 70th year . . . . .	23,019	23,975	46,994
71st to the 75th year . . . . .	21,809	23,337	45,146
76th to the 80th year . . . . .	17,367	17,763	35,130
81st to the 85th year . . . . .	11,205	11,612	22,817
86th to the 90th year . . . . .	5,050	5,305	10,355
Died after completing their 90th year . . . .	2,282	2,588	4,870
Total of all ages . . . . .	515,785	484,215	1,000,000



And, of 1,000,000 deaths, there were who died before the completion of their—

	Males.	Females.	Total.
3d year . . . . .	216,397	181,692	398,089
7th year . . . . .	37,148	36,079	73,227
14th year . . . . .	21,205	20,778	41,983
25th year . . . . .	27,299	23,571	50,870
45th year . . . . .	51,571	58,587	110,158
60th year . . . . .	56,676	53,264	109,940
80th year . . . . .	86,952	90,739	177,691
After completing their 80th year . . . . .	18,537	19,505	38,042
Total, as above . . . . .	515,785	484,215	1,000,000

Next is to be noticed the great mortality of children. Nearly two-fifths of all who died had not completed their third year. The human foetus suffers, in fact, so severely in the struggle of coming into the world, that, a great portion of new-born infants do not survive the injury they sustain. The truth of this remark will be made apparent by the following summary :—

In the Years	Males born.	Of whom there died in the first year, including those born dead,	Hence, on an average of 100,000 born, there died,
1820	249,205	50,184	20.130
1821	259,710	51,527	19,840
1822	258,523	55,999	21,661
1823	256,773	54,162	21,093
1824	260,134	54,738	21,042
1825	268,921	57,341	21,285
1826	269,917	61,703	22,860
1827	252,337	58,365	23,130
1828	257,396	57,050	22,165
1829	255,208	56,786	22,251
1830	255,562	57,538	22,514
1831	252,164	57,680	22,874
1832	248,259	55,969	22,545
1833	276,940	63,829	23,048
1834	285,495	70,118	24,560
In the 15 years . . . . .	3,906,544	862,989	22,091

In the Years	Females born.	Of whom there died in the first year, including those born dead,	Hence, on an average of 100,000 born, there died,
1820	235,193	39,663	16,864
1821	244,450	40,762	16,675
1822	244,439	45,104	18,452
1823	241,913	43,446	17,959
1824	245,204	43,480	17,732
1825	254,732	45,614	17,907
1826	255,706	49,403	19,320
1827	238,338	46,384	19,462
1828	242,111	45,388	18,747
1829	240,275	45,537	18,952
1830	241,679	46,072	19,063
1831	238,398	46,881	19,665
1832	233,714	45,192	19,337
1833	260,534	51,179	19,644
1834	269,787	56,797	21,053
In the 15 years . . . . .	3,686,473	690,903	18,742



The following is a general statement of the results of these tabular comparisons :—  
Of the whole 7,593,017 children, born in this period of 15 years, there were—

Born dead . . . . . 257,068

That is, of 100,000 . . . . . 3,386, which is a little above  $\frac{1}{30}$ th.

And of those who died after birth, but be-

fore the completion of their 1st year . . 1,296,824

That is, of 100,000 . . . . . 17,079

Total died in the 1st year . . . 1,553,892

That is, of 100,000 . . . . . 20,465

The number of children born dead, and the number dying in their first year, might assuredly be diminished by the influence of competent circumstances and of moral habits; inasmuch as the former would admit of more indulgence and attention to the wants of mothers and children among the great mass of the people; while the latter would occasion the prevalence of more maternal care in the periods of pregnancy and suckling. Still, however important may be the improvement of the people in these two respects, the number of children who do not survive the first year of their life will always remain very considerable.

The striking difference in the mortality of male and of female children supplies a remarkable testimony to the comparative amount of suffering they each experience in the act of parturition. This difference of mortality may hence be accounted for on the simplest principle; since, with similarity of other circumstances, larger bodies must evidently experience more difficulty in coming into the world than smaller ones. Doubtless there is a considerable variation of size in the new-born infants of either sex: still, it is certain that, in a majority of cases, and on an average of large numbers, the bodies of new-born *males* are larger or heavier than those of *females*: the consequence is, a greater number of males than of females suffer death at their birth.

In the above period of 15 years there were born, according to the foregoing statements,—

Males . . . . . 3,906,544

Females . . . . . 3,686,473

Of which were born dead,—

Males . . . . . 147,705

Females . . . . . 109,363

Therefore, of 100,000, there were born dead,—

Males . . . . . 3,781

Females . . . . . 2,967

The ratio of these two numbers is as 10,000 to 12,744.

That is, when, in any given number of new-born females, there are 200 born dead, in a similar number of new-born males the proportion born dead is very near 255.

Even among those who have outlived the perils of birth itself, the influence of the sufferings they have undergone remains for a long time apparent. Male children, inasmuch as their



sufferings have been greater, fall victims afterwards more easily than females to the numerous accidents to which the frail period of early childhood is especially liable.

Of the above-stated number of children born there died, in the course of their first year,—

Males . . . . . 715,284

Females . . . . . 581,540

There died, therefore, before the completion of the first year, in 100,000\*,—

Males . . . . . 18,310

Females . . . . . 15,775

The ratio of these two numbers is as 10,000 to 11,607.

That is, when, in any given number of female children, there are 200 that die after birth, but before the completion of their first year, in a similar number of male children there die, in the same period, very near 232. Here the difference in the mortality of the two sexes is manifestly smaller than among those born dead; because, as the period of life progresses, there are besides the different influence of the sufferings of birth, many circumstances which influence *equally* males and females, as air, light, food, and nursing. Still, the difference in the mortality of the two sexes in the first year remains sufficiently great to indicate the different degree of suffering sustained in parturition; the effects of which continue perceptible, though in a less degree, until the termination of the period of childhood, when, between the ages of 10 and 14, they wholly disappear.

After deducting the number of children born dead, and of those who died in their first year, there remain of those born in the 15 years,—

Males . . . . . 3,043,555

Females . . . . . 2,995,570

The ratio of these two numbers is as 1,000,000 to 1,016,019.

So that, although in the total number of children born, the excess of males was, as we have already shown, very near 6 per cent.; yet, in consequence of the greater amount of mortality among the male children, it had diminished at the end of the first year to  $1\frac{2}{3}$  per cent.

If monogamy be a distribution of the sexes which subsists by the ordination of Nature, then is it no less according to Nature that, in the years of puberty, there should be a numerical equality of males and females. But, it is also by the same ordination that, in a given number of male children, a greater proportion die in the first period of childhood than in the same number of females. Hence it became a necessary law of Nature that, just as many more males than females should be born as would be requisite to supply the deficiency occasioned by this greater degree of mortality. It is evident, from the foregoing facts that there can be no question about the numerical equality of the sexes, except as to an approximation within a thousandth part, or something more. Numerous circumstances, which, in our ignorance of their efficient causes, we regard as accidents, require consideration in computations of this description, as they serve to occasion some small deviations from the general order of Nature's operations, of which the laws are easily discovered. It must also be constantly borne in mind

\* Erroneously 10,000 in the German text.



that, the present statements are deduced from observations made only in one State (however considerable), and in one period of time; that it is solely for this State and this particular period that the validity of these deductions is assumed; and that, for other places and other times, there remains merely the presumption that similar effects are produced by similar causes. It has been often asserted that monogamy itself requires a numerical inequality in the sexes; that is, an excess of males at the marriageable age; inasmuch as the man, in his capacity of provider for, and guardian of, his family, is exposed to far more danger of losing life than the woman: but surely the assertors of this opinion must altogether overlook the dangers surrounding the woman in the period of gestation, in childbed, and afterwards during the continuance of its enfeebling effects. Of the 448,356 females who died in the above period of 15 years, at an age fit for bearing children, that is, between the 14th and 45th years, nearly *one-sixth*, namely, 70,215, died either immediately in the act of delivery or in the period of childbed; and, of the infants born, 1 in 108 at once cost the mother her life. As to the number of females who sunk as the victims of *other* evils, in consequence of gestation and parturition having enfeebled their bodies, and occasioned a predisposition to disease, the official tables give no information.

They show, however, that, in the 15 years in question, there were very nearly an equal number of each sex who died at an age of active life, between the 14th and 60th years; namely, of—

Males . . . . . 739,701

Females . . . . . 739,028

So that the causes of death which are peculiar to each sex appear, throughout this period of life, to have exerted an equal energy in their operations. It is also worthy of remark—1st, that, in the last four years of childhood, that is, from the 10th to the completion of the 14th year, the deaths consisted of very nearly an equal number of each sex, namely, of—

Males . . . . . 50,559

Females . . . . . 50,460

but, afterwards the mortality of males increased remarkably, and especially was greatly preponderant from the age of 20 to 25; for, in this period, the deaths were, of—

Males . . . . . 81,096

and of Females, only . . . 64,184

2dly, that, from the 25th to the 45th year, the proportion of deaths was reversed; for the mortality of females became preponderant; especially from the 30th to the 40th year; during which period the deaths were, of—

Males . . . . . 133,439

Females . . . . . 160,391

3dly, that, immediately after the 45th year, the excess of mortality began to appear again on the male side, and continued, though less considerably, to the completion of the 60th year, since in that period there died, of—

Males . . . . . 309,295

Females, only . . . 290,672

that is, an excess of 18,623 males.



4thly, that, after the 60th year, there died, in each successive period of 5 years, a greater number of females than of males, namely, of—

Males . . .	575,677
Females . . .	601,625

that is, the excess of females was 25,948.

It would appear from the preceding data, that, as to the great mass of the people, the females, for the most part, do not become married much before the age of 25; for, it is first from *this* point of time that, in consequence of gestation and parturition, the greater mortality of females begins to appear. It hence also appears that, with regard to the male sex, the period from the age of 20 to 25 is one in which death destroys a much greater number than in the years which immediately precede and follow. This in fact is, in many respects, the time when the young man begins to perform the duties of the citizen and to join in the pleasures of social life: and, though labour and liberty serve to invigorate the body and develop the energies of the mind, yet those who have feeble constitutions often sink fatally under the consequences of unaccustomed exertions and intensely excited emotions; and the amount of national power which is derived from the energies of this period of age is certainly not gained without a corresponding sacrifice of life. In the latter portion of middle age, from the 45th to the 60th year, the mortality is greater among the males than among the females. That the 60th year is outlived by a less number of men than of women, is a fact which is probably more justly attributable to the greater propensity among the men for indulging in the misuse of spirituous drinks than to any excessive exertion of the energies of youth. However, it still appears that, in both sexes, more than half of those who outlived the age of 25 survived also the age of 60.

According to the preceding statements, there	} 435,831 who had outlived the age of 25.
were, on an average, for 1,000,000 who died	
Of these there died before the completion of the	} 220,098
60th year . . . . .	

And the number of those who survived the 60th	} 215,733
year was. . . . .	

More particularly, there were, on an average, for 1,000,000 who died,—

Men, at the age of 26 to 60 . . . . .	108,247
„ beyond the 60th year . . . . .	105,489
Women, at the age of 26 to 60 . . . . .	111,851
„ beyond the 60th year . . . . .	110,244

Total, as above . . . . . 435,831

The number of those who, having outlived the 25th year, outlived also the 60th year, appears here indeed to be somewhat less than the number of those who died before 60, after surviving 25: but then, it is to be duly considered that, the present averages are taken upon a population whose numbers are in a State not of fixity, but of yearly increase; that, in



consequence of this increase, the tables exhibit, in the class of young ages, somewhat larger numbers than they would were the number of the population to remain stationary; and that hence they contain, in proportion, a greater number of deaths.

After the 60th year the mortality of the women is in no degree greater than the mortality of the men: on the contrary, women, for the most part, live somewhat longer than men; it may be because they are more temperate. And yet, according to the preceding data, it appears that, in each successive period of five years, subsequent to the 60th year, more women have died than men. This arises solely from the fact, that the number of those above 60 is larger among the females than among the males.

The census of the inhabitants, made at the end of each of the under-mentioned years, furnishes, altogether, the following proportions in the total numbers of each sex at the several ages here specified:—

CLASS I.—Children, to the completion of the 14th year of age.

Years.	Males.	Females.	Excess of Males.
1819	1,953,580	1,910,276	43,304
1822	2,119,817	2,088,926	30,891
1825	2,256,976	2,230,485	26,491
1828	2,367,200	2,343,893	23,307
1831	2,390,498	2,377,234	13,264
1834	2,419,013	2,402,202	16,811
Total . . .	13,507,084	13,353,016	154,068
Average . . .	2,251,180	2,225,402	25,678

CLASS II.—Persons beyond the 14th, but not having completed the 60th year.

Years.	Males.	Females.	Excess of Females.
1819	3,189,638	3,333,803	144,165
1822	3,309,223	3,419,640	110,417
1825	3,455,056	3,555,596	100,540
1828	3,572,360	3,656,421	84,061
1831	3,717,378	3,765,875	48,497
1834	3,891,483	3,957,500	66,017
Total . . .	21,135,138	21,688,835	553,697
Average . . .	3,522,523	3,614,806	92,283

CLASS III.—Persons beyond the 60th year of age.

Years.	Males.	Females.	Excess of Females.	Excess of Males.
1819	350,902	346,794	.....	4,108
1822	359,282	367,245	7,963	
1825	374,231	384,381	10,150	
1828	387,203	399,033	11,830	
1831	384,994	402,981	17,987	
1834	390,245	414,331	24,086	
Total . . .	2,246,857	2,314,765	72,016	4,108
Average . . .	374,476	385,794	11,318	



## CLASS IV.—Total of persons of all ages.

Years.	Males.	Females.	Excess of Females.
1819	5,494,120	5,590,873	96,753
1822	5,788,322	5,875,811	87,489
1825	6,086,263	6,170,462	84,199
1828	6,326,763	6,399,347	72,584
1831	6,492,870	6,546,090	53,220
1834	6,700,741	6,774,033	73,292
Total . . .	36,889,079	37,356,616	467,537
Average . . .	6,148,180	6,226,103	77,923

In comparing these numbers with other statements, it must not be overlooked, that the Principality of Lichtenberg, with a population of 35,256, is not included; although this territory was comprehended in the general census made at the end of the year 1834. It may here be remarked, in a general manner, that, the close approximation to a numerical equality of the sexes, which, in the war from 1806 to 1815, suffered great infraction, was gradually becoming restored by the natural course of births and deaths, when the operation of common causes was again interrupted by the epidemic disease of the last years, which effected much more destruction among the males than among the females. This numerical equality is produced, on the one hand, by the excess of male children in the number born, and, on the other, by the smaller mortality of females in the period of youth and the longer duration of their lives. A more detailed exhibition of the above-mentioned variations and transitions in triennial periods would here occupy too large a space.

One of the principal causes of mortality has been already noticed, namely, *birth itself*; the consideration of which is naturally involved in a review of the ages of the persons who died. An exposition of other causes of death is attended with much more uncertainty, for reasons which the following statements exhibit.

The most inevitably fatal of all the causes of death is the decrepitude of old age, which occasions the destruction of life after every other danger has been escaped. According to the official documents, there died, in the Prussian States, the following numbers, merely from the debilitating effects of age,—

In the Years	Males.	Females.	Total.
1820	16,970	18,730	35,700
1821	16,118	17,911	34,029
1822	16,976	18,970	35,946
1820-22	50,064	55,611	105,675
1823	18,986	20,717	39,703
1824	18,219	20,325	38,544
1825	18,724	20,741	39,465
1823-25	55,929	61,783	117,712
1826	20,959	23,198	44,157
1827	22,501	24,372	46,873
1828	23,135	25,470	48,605
1826-28	66,595	73,040	139,635



## A STATISTICAL VIEW OF THE BIRTHS AND DEATHS

In the Years	Males.	Females.	Total.
1829	26,077	29,168	55,245
1830	24,434	26,528	50,962
1831	28,459	31,541	60,000
1829-31	78,970	87,237	166,207
1832	24,551	27,154	51,705
1833	22,688	25,553	48,241
1834	22,180	24,976	47,156
1832-34	69,419	77,683	147,102
In the 15 years . . . .	320,977	355,354	676,331

The proportion of this number (676,331) to the whole number of deaths in the same period is as 123,933 to 1,000,000: it therefore appears that those who died from the influence of old age composed very nearly one-eighth of the total number of deaths. It appears, moreover, that old age alone was the immediate cause of the death of more than half of those who died beyond the 60th year. In the aggregate of deaths, in the 15 years in question, the following number occurred after the 60th year of age,—

Males . . . . 575,677

Females . . . . 601,625

and therefore, on an average, in 100,000 deaths of persons beyond the 60th year, there died, from the mere infirmities of age,—

Males . . . . 55,756

Females . . . . 59,066

that is, of those who died after the 60th year, nearly nine-sixteenths of the men and three-fifths of the women died solely of old age.

In general, the number of mankind who die in consequence of the enervation of age is greater than is commonly believed. In making this assertion we are but little liable to mistake; since it is usual with people even at a very advanced and helpless age to pretend, and desire to appear, to be younger, and not older, than they really are. Individuals may indeed be induced to assume an age older than the reality, for the purpose of entering institutions where only those above a specified age are admissible; but the managers of such establishments would probably not omit, in such cases, the precaution of demanding an official certificate of the candidate's age. Infirm old people live mostly so secluded, and disengaged from the business of the world, that the event of their death attracts but little notice, and leaves scarcely any perceptible chasm. In the year 1831, according to the official reports, there died, in the Prussian States,—

Of Asiatic Cholera . . . . . 32,647

And of the infirmities of old age . . . . 60,000

The former filled the whole country with consternation—the latter was scarcely observed. These statements involve an uncertainty which it is almost impossible to exclude; for the debility of old age makes many attacks of sickness mortal which, to patients more robust, would not be so; and many, it appears, have been reported as the victims of disease, when, in fact,



they have really died from the infirmities of age. A great number of aged people also die very unexpectedly, in a state of health apparently vigorous, and without any assignable cause but mental excitement. To this is attributable that so great a number of old people were swept off in the year of the cholera, 1831. A large portion of these 60,000 died, not immediately of the infirmities of age, but of the cholera; that is, in consequence of the affliction and terror which it diffused around.

Of those who died violent deaths, from a variety of accidents, there were,—

In the Years	Males.	Females.	Total.
1820	4,031	1,208	5,239
1821	4,110	1,327	5,437
1822	4,311	1,445	5,756
1820-22	12,452	3,980	16,432
1823	4,264	1,423	5,687
1824	4,276	1,252	5,528
1825	4,493	1,356	5,849
1823-25	13,033	4,031	17,064
1826	4,748	1,348	6,096
1827	4,664	1,440	6,104
1828	4,585	1,352	5,937
1826-28	13,997	4,140	18,137
1829	4,885	1,558	6,443
1830	4,725	1,371	6,096
1831	4,715	1,490	6,205
1829-31	14,325	4,419	18,744
1832	4,730	1,354	6,084
1833	5,130	1,380	6,510
1834	5,850	1,545	7,395
1832-35	15,710	4,279	19,989
In the 15 years . . . .	69,517	20,849	90,366

In this number of cases of violent death there is included the following number of suicides; namely, of—

Males . . . .	13,699
Females . . . .	2,981
Total . . . .	16,680

The remaining portion of deaths are registered as cases of fatal accidents; namely, of—

Males . . . .	55,818
Females . . . .	17,868
Total . . . .	73,686

The difference in the amount of these two classes of deaths is so far inconsequential as that, in numerous instances, it cannot with certainty be ascertained whether or not a suicide has been committed. The probability is that, cases of suicide are much more numerous than the



Police are aware of, and consequently more than are registered as such in the list of deaths. Many cases of suicide are entered in the Bills of Mortality not even as *fatal accidents*, but as deaths occasioned by apoplexy and other sudden attacks of disease. Such instances of misnomer probably occurred more frequently in past years than at present: it is therefore not unreasonable to conclude that, if more of these instances were publicly known, the number of suicides here given would be considerably increased.

In each triennial period which lies between two censuses the amount of accidental and violent deaths is increased, and indeed in a ratio something greater than that of the increase of population. The mean numbers of the inhabitants for these periods have been given at the commencement of the present paper. That for 1820-22 was to that for 1832-34 as 1,000,000 to 1,165,484; so that, to correspond with the ratio of increase in the population, the number of violent deaths which, in the triennial period 1820-22, was 16,432, should in 1830-34 have been 19,150, but the number registered in this latter period is 19,989.

The progress of improvement in morals and manners, and the more general diffusion of knowledge and of wealth, ought naturally to diminish the number of these fatal occurrences; but the increase of human activity, self-confidence, and a sense of honour, often ill-founded and fatuitous, have certainly served to increase them.

On an average, in 1,000,000 males who died, there were 24,697 instances of violent death; and, in 1,000,000 females who died, the number of deaths from similar causes was 7,890; that is, very nearly 1 in 40 among the males, and among the females 1 in 127.

Since the discovery and general adoption of vaccination, the Small Pox has become comparatively an evil of little importance; but therefore it is so much the more necessary to observe and register the particular cases in which it still is destructive of life. Hence the annual Bills of Mortality contain a separate entry of the deaths which have had this disease for their cause. There have arisen, however, repeated complaints that, under this head, many entries have been made of deaths which were not occasioned by the genuine Small-Pox, but by some other species of cutaneous eruption; and these mistakes, arising from misinformation, have been irremediable, especially with regard to the country districts, where numerous individuals still die unattended by any competent scientific physician. The following tabular view presents apparently a greater number of deaths than are correctly attributable to the genuine Small-Pox. It may serve, however, as an indication of the limits beyond which the fatal effects of this malady certainly do not extend.

In the Prussian States there were registered, as having died of the Small-Pox,—

In the Years	Males.	Females.	Total.
1820	615	575	1,190
1821	1,032	921	1,953
1822	1,250	1,138	2,388
1820-22	2,897	2,634	5,531
1823	1,195	1,159	2,354
1824	940	810	1,750
1825	985	908	1,893
1823-25	3,120	2,877	5,997



In the Years	Males.	Females.	Total.
1826	943	850	1,793
1827	1,643	1,551	3,194
1828	1,282	1,137	2,419
1826-28	3,868	3,538	7,406
1829	1,277	1,198	2,475
1830	1,629	1,505	3,134
1831	864	682	1,546
1829-31	3,770	3,385	7,155
1832	2,147	1,842	3,989
1833	4,219	3,777	7,996
1834	3,541	3,084	6,625
1832-34	9,907	8,703	18,610
In the 15 years . . .	23,562	21,137	44,699

Thus, on an average, there were, in 1,000,000 deaths, even according to this Table, only 8,191 caused by the Small-Pox—that is, 1 in 122; and, it is very probable that the correct number was considerably less. The last three years present an increase in the numbers. On an average in 1,000,000 of the whole deaths there died of the Small-Pox,—

In the Years	
1820-22	6,152
1823-25	6,216
1826-28	6,774
1829-31	5,763
1832-34	14,791

From this it appears that, even in these last three years, the Small-Pox occasioned only 1 in 68 of the aggregate of deaths. The destructive agency of this contagion, which once occasioned such devastation, is now then, even in the period of its greatest prevalence, exceedingly diminished.

Greatly interesting as it would be to possess a complete and correct account of the agency of each separate form of disease in producing deaths in the Prussian States, the desire of seeing such a document constructed must be relinquished; since the official reports, in by far the greatest number of cases, remain still very unworthy of reliance. The population is yet too greatly deficient in that denseness, opulence, and mental culture, which is requisite in order to furnish a comprehensive and authentic classification of deaths, with regard to their causes. The attempts to obtain more accurate information were, after a consultation with the body of provincial authorities at Berlin, in 1817, obliged, on account of difficulties, to be abandoned: and at present the cases of death by diseases, officially registered in the Statistical Bureau, are exhibited only in the following divisions. There died from

Internal Acute Diseases.			
In the Years	Males.	Females.	Total.
1820	34,429	30,983	65,412
1821	30,997	28,115	59,112
1822	37,667	34,291	71,958
1820-22	103,093	93,389	196,482



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In the Years	Males.	Females.	Total.
1823	37,045	33,323	70,368
1824	39,166	34,771	73,937
1825	38,922	35,087	74,009
1823-25	115,133	103,181	218,314
1826	41,625	37,958	79,583
1827	46,129	41,233	87,362
1828	46,080	41,196	87,276
1826-28	133,834	120,387	254,221
1829	43,336	38,374	81,710
1830	47,163	41,881	89,044
1831	66,990	57,587	124,577
1829-31	157,489	137,842	295,331
1832	56,748	49,932	106,680
1833	50,871	45,830	96,701
1834	54,045	48,840	102,885
1832-34	161,664	144,602	306,266
In the 15 years . . . .	671,213	599,401	1,270,614

From Internal Chronic Diseases there died,—

In the Years	Males.	Females.	Total.
1820	56,775	55,517	112,292
1821	57,569	55,450	113,019
1822	60,773	58,544	119,317
1820-22	175,117	169,511	344,628
1823	61,796	59,433	121,229
1824	61,029	59,387	120,416
1825	63,124	60,577	123,701
1823-25	185,949	179,397	365,346
1826	69,776	66,374	136,150
1827	69,880	65,302	135,182
1828	71,810	68,556	140,366
1826-28	211,466	200,232	411,698
1829	76,707	73,856	150,563
1830	77,050	73,160	150,210
1831	87,422	82,826	170,248
1829-31	241,179	229,842	471,021
1832	81,371	76,975	158,346
1833	81,142	77,285	158,427
1834	81,920	78,902	160,822
1832-34	244,433	233,162	477,595
In the 15 years . . . .	1,058,144	1,012,144	2,070,288



## From Suddenly-Fatal Cases of Sickness there died,—

In the Years	Males.	Females.	Total.
1820	12,954	11,144	24,098
1821	12,249	9,929	22,178
1822	12,636	10,717	23,353
1820-22	37,839	31,790	69,629
1823	13,098	10,878	23,976
1824	12,323	10,318	22,641
1825	13,603	10,954	24,557
1823-25	39,024	32,150	71,174
1826	14,144	11,660	25,804
1827	14,508	11,796	26,304
1828	14,588	12,234	26,822
1826-28	43,240	35,690	78,930
1829	15,744	12,796	28,540
1830	15,168	12,670	27,838
1831	17,784	14,421	32,205
1829-31	48,696	39,887	88,583
1832	16,346	13,699	30,045
1833	15,662	12,966	28,628
1834	16,399	13,472	29,871
1832-34	48,407	40,137	88,544
For the 15 years . . .	217,206	179,654	396,860

## From External Disorders and Injuries there died,—

In the Years	Males.	Females.	Total.
1820	3,789	3,051	6,840
1821	3,456	2,830	6,286
1822	3,773	3,171	6,944
1820-22	11,018	9,052	20,070
1823	3,838	3,005	6,834
1824	3,504	3,070	6,574
1825	3,736	3,059	6,795
1823-25	11,078	9,134	20,212
1826	4,116	3,351	7,467
1827	4,094	3,380	7,474
1828	4,197	3,591	7,788
1826-28	12,407	10,322	22,729
1829	4,272	3,612	7,884
1830	4,280	3,343	7,623
1831	4,620	3,803	8,423
1829-31	13,172	10,758	23,930
1832	4,340	3,632	7,972
1833	4,166	3,533	7,699
1834	4,324	3,585	7,909
1832-34	12,830	10,750	23,580
In the 15 years . . .	60,505	50,016	110,521



## From Undefined Diseases there died,—

In the Years.	Males.	Females.	Total.
1820	13,665	12,520	26,185
1821	13,502	12,079	25,581
1822	14,544	13,576	28,120
1820-22	41,711	38,175	79,886
1823	14,842	13,398	28,240
1824	14,466	13,475	27,941
1825	15,247	13,786	29,033
1823-35	44,555	40,659	85,214
1826	16,393	15,158	31,551
1827	16,715	15,051	31,766
1828	16,878	15,323	32,201
1826-28	49,986	45,532	95,518
1829	17,610	16,286	33,896
1830	17,892	16,431	34,323
1831	19,579	17,914	37,493
1829-31	55,081	50,631	105,712
1832	18,178	16,447	34,625
1833	18,220	16,364	34,584
1834	18,182	16,526	34,708
1832-34	54,580	49,337	103,917
In the 15 years . . . .	245,913	224,334	470,247

From the preceding classification we derive then the following general view of the total numbers of those who died by disease in the period of 15 years, namely,—

	Males.	Females.	Total.
1. From Internal Acute Diseases . . . .	671,213	599,401	1,270,614
2. „ Internal Chronic Diseases . . . .	1,058,144	1,012,144	2,070,288
3. „ Suddenly-Fatal Cases of Sickness . .	217,206	179,654	396,860
4. „ External Disorders and Injuries . .	60,505	50,016	110,521
5. „ Undefined Diseases . . . . .	245,913	224,334	470,247
Total . . . . .	2,252,981	2,065,549	4,318,530

To these, add those who died,—

1. From the Infirmities of Old Age . . . .	320,977	355,354	676,331
2. By Violent Causes . . . . .	69,517	20,849	90,366
3. By the Small-Pox . . . . .	23,562	21,137	44,699
4. In Delivery and in Childbed . . . . .	.....	70,215	70,215
5. In or before Birth (Born Dead) . . . .	147,705	109,363	257,068
Total . . . . .	2,814,742	2,642,467	5,457,209

This is the total number which, in the commencement of the present paper, was given as



the whole amount of deaths in the Prussian States, in the 15 years from 1820 to 1834. On an average, in 1,000,000 deaths, there died,—

	Males.	Females.	Total.
1. From Internal Acute Diseases . . . .	122,996	109,836	232,832
2. „ Internal Chronic Diseases . . . .	193,898	185,469	379,367
3. „ Suddenly-Fatal Cases of Sickness . .	39,802	32,921	72,723
4. „ External Disorders and Injuries . .	11,087	9,165	20,252
5. „ Undefined Diseases . . . . .	45,062	41,108	86,170
6. „ the Infirmities of Old Age . . . .	58,817	65,116	123,933
7. By Violent Causes . . . . .	12,739	3,820	16,559
8. „ the Small Pox . . . . .	4,318	3,873	8,191
9. In Delivery and in Childbed . . . .	...	12,867	12,867
10. In or before Birth (born dead) . . .	27,066	20,040	47,106
Total dead, from all causes . . . .	515,785	484,215	1,000,000

Of all the causes of death here enumerated the class which appears to display the most powerful agency is that of the *Internal Chronic Diseases*. It comprehends, according to the arrangement adopted in the tables, the following forms of disease:—

Intermittent Fever (*wechsel fieber*), Irregular Hectic (*unregelmässige schleichende fieber*), Hooping-Cough (*stickhusten*), Convulsions (*krämpfe*), Colic (*kolik*), Gout (*gicht*), Hydrocephalus (*wasserkopf*), Marasmus (*abzehrung*), Pulmonary Consumption (*lungensucht*), Dropsy (*wassersucht*), Asthma (*engbrüstigkeit*), Emphysema (*windgeschwulst*), Epilepsy (*epilepsie*), Constipation (*leibesverstopfung*), and Mania (*tobsucht* or *raserie*). These have occasioned the death of nearly 38 per cent. of all who died; and they have operated upon both sexes to an almost equal extent: for, among 100,000 deaths of females from various causes, 38,303 were by these diseases, whilst of 100,000 men there died 37,593, which shows indeed a small excess on the side of the females. Doubtless a portion of these cases originate in constitutional innate predisposition and organic defects; but certainly the greater portion of them are the consequence of excessive exertion, of destitution, and of errors in diet; and therefore are found, for the most part, to belong to the latter half of the period of middle age, that is, between the years of 40 and 60.

If, with the mean average numbers of the existing population in the five triennial periods (given at the commencement of this paper), we compare the number of contemporaneous deaths occasioned by the above-stated diseases, we find that, of 1,000,000 persons living at once, there died annually from these diseases,—

In the Years	
1820, 21 and 22 . . .	10,009
1823, 24 and 25 . . .	10,182
1826, 27 and 28 . . .	10,986
1829, 30 and 31 . . .	12,188
1832, 33 and 34 . . .	12,009

Hence the mortality occasioned in this period by the operation of these causes shows the proportion of deaths to the living to be from 1 to 1 $\frac{1}{3}$  per cent. per annum.

The next, though considerably less influential, cause of mortality, exists in *Internal Inflammatory Diseases*, of which, in the tables, we have the following enumeration:—



Inflammatory Fever (*hitziqe fieber*), Pneumonia (*brust fieber*), Inflammation of the Brain (*hirnentzündung*), Quinsy (*halsentzündung*), Measles (*masern und rötheln*), Scarlet Fever (*scharlach fieber*), Miliaria and Purpura (*friesel und fleck fieber*), Diarrhæa (*durchfall*), and Dysentery (*ruhr*).

The deaths occasioned by Asiatic Cholera are included in this class; but not those occasioned by the Small-Pox, as already has been shown. The number of deaths occasioned by this class of diseases was somewhat less than three-fifths of the number occasioned by the class of internal chronic diseases. It appears, also, that they affected both sexes in nearly an equal degree; yet, with a slight preponderance on the side of the males; thus, in 100,000 deaths of males from various causes the number occasioned by these diseases was 23,846, and in 100,000 deaths of females from various causes there died from these diseases 22,684. Of 1,000,000 living at once, the number who died annually from internal inflammatory diseases was, on an average,—

Of the Years	
1820, 21 and 22 . . .	5,758
1823, 24 and 25 . . .	6,084
1826, 27 and 28 . . .	6,784
1829, 30 and 31 . . .	7,642
1832, 33 and 34 . . .	7,701

Hence the mortality occasioned in this period by the operation of these causes shows the proportion of deaths to the living to be between five-ninths and seven-ninths, or more exactly between twenty-three-fortieths and seven-ninths per cent. per annum.

For every 17 deaths, occasioned by the diseases of the two preceding classes collectively, there were very nearly 2 occasioned by rapidly-fatal attacks of illness; as Hæmorrhage (*blutflüsse*), Asphyxia (*stickflüsse*), and Apoplexy (*schlagflüsse*). Of these suddenly-fatal afflictions there was a considerable excess among the males, of whom, in 100,000 deaths, there were 7,717, while, in the same number of deaths of females, the cases were only 6,799. The following is the proportion of these sudden deaths to the number of the existing population. In 1,000,000 inhabitants, there died annually from these causes, on an average,—

Of the Years	
1820, 21 and 22 . . .	2,041
1823, 24 and 25 . . .	1,984
1826, 27 and 28 . . .	2,106
1829, 30 and 31 . . .	2,292
1832, 33 and 34 . . .	2,226

Thus, in the first six years, nearly 1 in 500 of the existing population died from Suddenly-fatal Fits of Sickness. In the subsequent years the number increased, and, at the most sickly period, in every 436 inhabitants 1 sudden death occurred annually.

Only a little more than one-fiftieth part of the total deaths were occasioned by External Diseases, among which are to be enumerated Phlegmon and Gangrene (*äusserliche entzündung und brand*), Strangulated Hernia (*eingeklemmte bruchschäden*), Diseases of the Urinary Organs (*krankheiten der urinwege*), Malignant Cancerous Ulcerations (*bösartige und krebs-geschwüre*). The deaths of this class present a large excess on the side of the



males, of whom, in 100,000 deaths from various causes, there were 2,150 occasioned by these disorders and injuries, while, in 100,000 deaths of females, there were only 1,893. On an average, in 1,000,000 inhabitants living at the same time, the annual deaths from these external disorders and injuries were, on an average,—

Of the Years	
1820, 21 and 22 . . .	588
1823, 24 and 25 . . .	563
1826, 27 and 28 . . .	607
1829, 30 and 31 . . .	619
1832, 33 and 34 . . .	593

which, on the average, is nearly 6 in 10,000.

The number of deaths from Undefined Diseases remains so large, in consequence of the still-continued deficiency of a comprehensive and scientifically-arranged register of mortality. Of more than a twelfth part of the whole number of deaths nothing is known but that the individuals died of some disease, without the addition of any particulars of its nature and character. Including these deaths from Undefined Diseases, the proportion of the number of deaths arising from all the destructive causes, here designated diseases, was to the total number of deaths as 791,344 to 1,000,000, that is, nearly four-fifths of the whole.

More particularly, in 1,000,000 contemporaneous inhabitants, there died annually from these Undefined Diseases, on an average,—

Of the Years	
1820, 21 and 22 . . .	2,341
1823, 24 and 25 . . .	2,375
1826, 27 and 28 . . .	2,549
1829, 30 and 31 . . .	2,735
1832, 33 and 34 . . .	2,613

Under this class of deaths we are obliged to comprehend those which, according to the tables, were cases of Hydrophobia; because it has happened that the title of "Deaths from Hydrophobia," has been misunderstood in a most incomprehensible manner by some of the subordinate authorities; and that, in some cases, deaths from this disease (*wasserscheu*) have been entered under the head of Dropsy (*wassersucht*). It is only within the last nine years that a greater degree of accuracy has been observed: we may therefore here give a separate view of the statements referring to this portion of the period, although they are still attended with some uncertainty, which, in proportion to the smallness of the numbers, is the more likely to occasion fallacious conclusions. According to these statements, the numbers who died, in the Prussian States, from Hydrophobia, were,—

In the Years	Males.	Females.	Total.
1826	32	32	64
1827	34	27	61
1828	32	27	59
1826-28	98	86	184
1829	24	21	45
1830	22	27	49
1831	21	17	38
1829-31	67	65	132



In the Years	Males.	Females.	Total.
1832	28	27	55
1833	24	12	36
1834	25	18	43
1832-34	77	57	134

From the two last triennial periods, in which it is probable the statements are the most correctly given, the following proportions may be deduced. Of 1,000,000 of contemporaneous inhabitants there died, *annually*, from the Hydrophobia, on an average,—

Of the Years	
1829, 30 and 31 . . .	3
1832, 33 and 34 . . .	3

The proportion is, in both these triennial periods, alike, at least within a small fraction, namely four-tenths.

It appears then, in general, that, the instances of these lamentable cases are not frequent, and that they recur perhaps only accidentally in the same place so often as to cause any alarming remembrance. We are far from wishing to divert the attention of the police from this object; but, in order to apportion to each cause of evil the consideration which its relative importance demands, we must not omit to observe that, in the same six years, in which the number of wretched deaths occasioned by Hydrophobia was 266, there were 38,733 occasioned by the other numerous causes of *violent death*; and that these two numbers stand related each to the other nearly as 10 to 1,456.

In conclusion, the following inference may be established, namely, that, the greater mortality in the six years 1829-34 as compared with that of the nine\* years 1820-28, was not at all occasioned by any separate form of disease. In these last six years it is evident that there was a greater activity in all the causes of death, and therefore there must have existed a general and powerfully-active cause by which this remarkable phenomenon was produced.

It must be reserved for another place to enter upon a closer examination of the data which the foregoing statements supply, to investigate especially the comparative results presented by the peculiar circumstances of each division of the country, and to establish or determine them with greater precision; as such an undertaking would extend beyond the limits of a paper admissible in the columns of a periodical journal.

One important fact still remains to be added, that, in computations of this nature, it is necessary to operate first, as in the preceding document, *on large masses*, in order that we may use the result as an instrument in proceeding to exhibit proportions on a more limited scale; for, without the assistance of such a medium of comparison, it must always be a difficult matter to separate that which is merely local and incidental from that which is valid for the formation of more extensive and more important inductions.

HOFFMAN,

*Director of the Statistical Bureau.*

Berlin, 7th October, 1835.

\* Erroneously "sechs" (six) in the German text.