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# ENGLISH PUBLIC FInANCE From the Revolution of 1688 

With Chapters on<br>The Bank of England

By<br>Harvey E. Fisk

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1920


> "Statea, like individuala, who obeerve their engagements ere reapected and trusted." (ALEIMNEE HAMLTON.

THIS book is intended to give in form for ready reference the saliene facts in regard to the finances of the United Kingdom.

The earlier chapters tell the financial story of the critical period of the war from the fateful August 4, 1914, when war was declared, to the budget speech of Chancellor Chamberlain on April 19, 1920, which so ably dealt with the financial problems of the reconstruction period. The later chapters discuss the revenue, expenditure and debt prior to 1914 and England's methods of financing from the time of William the Conqueror. Present day financial methods are traced back to their origins in these early days.

The activities of the Bank of England are so closely interwoven with the operations of the English Treasury that to apprehend clearly Great Britain's public finance one should have knowledge of the history, the functions and the operations of the Bank, therefore several chapters have been dovoted to these matters.

Almost without exception the statements of fact contained in this book, especially those having to do with its main pur-pose-public finance-are based upon a study of official documents. Where necessary to depend upon secondary sources care has been taken to refer only to those admittedly authoritative.

We are hopeful that this book may contribute to a better understanding of Great Britain's present financial problems and how they are being solved, and that it may prove to be a useful work of reference for our friends.

Baneers Taust Company.
New York, June, 1920.

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Norm-All money statistics are in sterling. The following abbreviations are used
 7 d one pound sterling, ten shillings and seven pence. The specie equivalents in American money are fim $\$ 4.862 / 1$; $\mathrm{am} 24^{1 / 4}$ centa; $\mathrm{d}=3$ cents.

Statistical statements in the text and tables as a rule are given in rounded figures.

# English Public Finance 

Chapter I
" 1920 "

THE great world war of 1914-1919, officially terminated by the acceptance by H. M. King George V, on July 31, 1919, of the Peace of Versailles, signed June 28, 1919, cost Great Britain over $\mathcal{E} 10,000$ million aterling. If we add to this sum the war expenditures of the British self-governing Dominions; Canada, $£_{407}$ million; Australia, $£_{379}$ million; New Zealand about $\mathrm{f}_{76}$ million; Union of South Africa, £60 million and little Newfoundland about $£_{3}$ million; rogether with the war expenses of the Crown Colonies, and India's war expenditure of $£ 20$ million and contribution of $\mathrm{f}_{\mathrm{i}} 00$ million, we arrive at a grand total for the British Empire of over $£_{11,000}$ million. This was an expenditure made necessary by the war in excess of what would have been the expenditure for the period on the basis of the prewar budget.

An analysis of the total expenditure of the United Kingdom from 1688 to 1920 discloses the amazing fact that for the six fiscal years, beginning March 31, 1914, and ending March 31, 1920, the expenditure of the Government actually exceeded the total expenditure for thet two and a quarker

[^0]centuries preceding 1914. .The exact figures are, for the 226 years £10,944 million, for the six years $£ 1 \mathrm{r}, 268$ million.

The people of Great Britain paid into the coffers of the Government in taxes and other revenue collections over 36 per cent. of this vast sum of more than eleven thousand million sterling. The other 64 per cent. was borrowed.

The war borrowings of Great Britain at their maximum, December 31, 1919, amounted at par value of securities issued to $£ 7,368$ million, $\mathfrak{f 6 , O I I}$ million furnished by her own people, $£_{1,027}$ million borrowed in and from the United States and $£ 330$ million borrowed from other foreign nations and from the Dominions. On the other hand, Great Britain had then loaned to the Dominions £x86 million and to her allies $£_{1}, 666$ million, so that the amount loaned abroad exceeded by $£_{495}$ million the amount borrowed abroad.

Thus we find that the 46 million people of the British Isles raised entirely from their own resources a net amount of $£ 9,911$ million, over $£ 215$ for each one of their number.

For the active war period covering the five fiscal years ending March 31, igig, from $221 / 2$ per cent. to $341 / 2$ per cent. of the expenditure was raised from taxation, other revenue collections, and war contributions. In the fiscal year ended March 3I; 1920, taxes and other revenue produced about 65 per cent. of the aggregate budget of $£_{1,662}$ million while receipts from war contributions, sales of war property and income from trading undertakings yielded about 16 per cent., leaving less than 20 per cent. to be provided from loans. Indications now are that in the current fiscal year (1920'21) the budget will balance not alone without any addition to the debt but, if the present plans of the Government materialize, with a substantial surplus for the reduction of debt.

The Dominions have made an equally good or even better
showing. Canada has taxed herself for nearly fifty per cent (48.10) of her total war time expenditure; Australia raised 40 per cent. from taxation and New Zealand appears to have raised 57 per cent. from taxation.

The national wealth of Great Britain, or, as some economists prefer to say, the national capital, at the beginning of the war is estimated to have been $£ 14,500$ million. There has probably been no actual addition during the war. On the contrary, doubtless, there has been some depletion therein. However, measured by the paper pound sterling of today we may quite conservatively take $£ 24,000$ million as the figure with which to compare the $£ 8,078$ million to which the debt grew from the pre-war figure of $£ 711$ million; giving us a ratio of say, $331 / 3$ per cent. of debe to wealth. The debt charge for interest and management is now about $£_{3} 60$ million, comparing with $\mathfrak{f}_{24}$ million before the war. The present-day charge is about ten per cent. of the national income estimated to be $\mathfrak{£}_{3,600}$ million.

Having in mind these statistics, so vast as to be almost beyond comprehension, it will be of interest to know the conditions under which they developed and the means used to handle the problems of war finance.

# Chapter II <br> "1914" 

IT was the turn of the business year. The cloud of pessimism which had overhung the international finance markets since the outbreak of the Balkan wars in 1912 seemed about to disappear.

The half-yearly settlements had passed over smoothly in the chief money centers of Europe. The Bank of England and all the great central banks on the Continent were in strong credit condition. Some of these banks had accumulated reserves beyond anything hitherto known. In fact, the accumulations of gold were becoming so great as to indicate that a great revival in trade might be expected. Deposits in the banks of the United Kingdom were heavier than at any time in their history, amounting to about $£ 1,150$ million, an increase in the fifteen years since the beginning of the Boer War of over $£_{300}$ million.

The open market rate of discount in London had averaged in the previous six months $£ 2$ tos per cent.; lower than for any year since 1908, when the average rate for the year was $\boldsymbol{£}_{2}{ }_{5} \mathbf{5} 7 \mathrm{~d}$ per cent.; and with that exception lower than at any period since 1898 . This condition was in great contrast to that which had characterized the money markets in 1912 and 1913 when the discount rates had been high-averaging $f_{3}$ ins 6 d per cent. in the former year, and $£_{4} 6 \mathrm{~s}$ iod per cent. in the latter year. These high rates in large part had been due to the heavy demands made upon the capital of the world for the expenses of the Balkan wars and the dislocation of trade through Southern Europe because of these wars and for the subsequent rehabilitation of the war-torn territory. 4]

Commodity prices in these years had been high and investment security prices low.

With 1914 had come a change in this situation and events appeared to be favoring a revival in the securities markets, with less active commodities markets. England had enjoyed one of the best six months business on record in her foreign trade, even though it had been conducted on a somewhat lower price level than in the previous year. At the moment trade was quiet. It was estimated that during the half year England had invested over $\boldsymbol{£}_{100}$ million abroad. Her total investments abroad were estimated to be not less than $£_{4,000}$ million, while her annual income from these investments, from freights paid for carrying foreign goods in British ships and from banking charges was estimated at $\AA_{350}$ million.

As we have already seen, her national debt was only £7II million, less than five per cent. of her estimated national wealth of $\mathcal{E}_{14,500}$ million.

Therefore, from every point of view, England in July, 1914, was in a strong financial condition. Her people were prosperous. The welfare of even the humblest classes had been made the subject of important governmental action, while the Chancellor of the Exchequer, David Lloyd George, had given notice of his intention to bring forward 2 great program of land reform. Relations with her Overseas Empire were never closer or more cordial. Earnest efforts were being made to work out some plan for representation of the great Dominions in an Imperial Parliament or for some equivalent arrangement. The only serious political situation was the perennial one of Ireland, where preparations for armed resistance by the Ulsterites to Mr. Asquith's proposed Home Rule plans gave the Government considerable anxiety.

## War Breaks-Emergency Measures

On the 23rd of July came the news of Austria's peremptory ultimatum to Serbia. On the 25th Serbia's reply and on the 28th the startling advices that Austria-Hungary had declared war on Serbia. Money began to tighten; the stock markets became weak. On the ist of August, Germany and Russia were at war. The foreign bourses were in a state of panic. London and New York were the only important open markets. They were flooded with international securities. Between July 20th and July 30th Consols fell six points, India 3 $1 / 2$ s four, French Rentes five, home rails from five to fifteen points. American rails broke heavily. Canadian Pacific sold off $251 / 2$ points. South Americans dropped from four to twenty-four points. Still England was not involved. On the following day the Stock Exchange closed. The newspapers of the day reported that "paralysis, not panic," was the word which defined conditions. On August ist France ordered a general mobilization following a peremptory note from Germany on July 3 ist demanding that she define her attitude within twelve hours. On this same day German troops occupied Luxemburg and on the 4th Germany had started her troops across Belgium. At II p. m. of the 4th Great Britain entered the lists in defense of Belgian neutrality in accordance with her treaty obligations.

Fortunately for the financial world these events were taking place at the time of the London Bank Holiday which extended from Saturday, August Ist, through Monday the 3 rd . One of the first steps taken was to extend the holiday to the seventh. This gave time in which to take remedial measures. On July 31st the Bank rate had been raised to 8 per cent. On the following day it was raised to 10 per cent.

Naturally on the eve of the holiday many people had required money for their week-end payments and holiday expenses. This caused a demand on the banks for gold, for it will be remembered Bank of England notes are not issued in denominations of less than five pounds. The joint-stock banks declined to pay out gold, telling their patrons to go to the Bank of England. This unprecedented action very naturally frightened the public and stimulated their desire for gold, leading to heavy demands being made upon the Bank.

During the extended holiday important steps were taken to insure the stability of the financial structure.

## The Currency Notes

Provision was made to issue Government notes in denominations of $\mathrm{EI}_{\mathrm{I}}$ and of 10 shillings. They were issued by the Bank of England as agent. The plan was to lend a supply of such notes to each bank up to 20 per cent. of its deposits. For this advance the banks were to be taxed at the rate of 5 per cent. per annum upon the par value of the notes borrowed. The banks were thus provided with funds for over the counter payments.

## Clearing House Certificates

For inter-bank transactions recourse was had to Clearing House Certificates a device adopred from American practise in times of special stress. These certificates were protected by the deposit of securities with the Clearing House.

## The Moratorium

The next step was, on August 4th, to declare a limited moratorium-that is, a limited period during which creditora could not demand payment from those indebted to them.

This was at first for one month, afterward extended to three months.

## Protecting the Acceptance Market

The most important action at this time was the provision made on August 13th, that the Bank of England, under Government guaranty against loss to itself for so doing, should discount pre-moratorium bills, whether drawn by enemy aliens or by others, without recourse to the holder, "giving the acceptor the opportunity until further notice of postponing payment, interest being payable in the meantime at 2 per cent. over bank rate." This offer applied not only to such bills of exchange as were customarily discounted by the Bank but also to other good trade bills and foreign and colonial acceptances.

A moment's reflection will show how all important this action was and also the importance of the subsequent arrangements for securing a free market for bills of exchange. For years London had been the banker for the world. The system of acceptances had helped to bring this about. If a coffee grower in South America sold coffee to New York, or to Berlin; if a sugar producer in Cuba or in Java sold sugar in Constantinople or in Paris; if an Indian merchant sold articles of luxury; the Chinaman, tea; the American or the Egyptian, cotton, the settlements were almost invariably made through London. The Chinaman might sell his tea in New York, but he would arrange for payment through London. The New York tea buyer through his bank in New York would engage a London Acceptance House or Bank to pay the Chinese merchant by accepting a draft which that merchant would draw on the New York buyer through London. To meet his obligation the New Yorker would perhaps buy a bill which a wheat-
grówer in Minnesota was drawing on London to pay for wheat which had gone to France.

These bills coming in from all parts of the world were mutually cancelling each other, while during the period they had to run they were considered the choicest, the most liquid asset, next to actual cash, which a bank could hold. If a bank required money to meet an unexpected demand it need only offer a block of bills in the market and thus could immediately obtain the funds required.

When war, involving so many of the great mercantile nations, was unexpectedly declared, the banks suddenly found their assets "frozen"-entirely unavailable. Worse than this, there were bills in transit which they and the acceptance houses were obligated to accept upon arrival and there were millions in value coming due day by day which they were obligated on behalf of clients to pay. Manifestly this was the great financial problem requiring instant attention. This situation was met first of all as already stated, by providing a market with the Bank of England for the pre-moratorium bills. A few weeks later, on September 4th, this was followed by a further provision whereby acceptors who were unable to meet the pre-moratorium bills at maturity received the necessary funds from the Bank of England at 2 per cent. over Bank rate. By this process endorsers on the bill were released. The loans made to the accepting houses were, for the most part, to constitute a second and not a first claim upon their assets. This greatly increased the negotiability of post-moratorium bills accepted by the same houses.

## Treasury Bills Issued

On August 19th tenders were asked for $£_{15}$ million Treasury Bills to provide for the immediate needs of the Govern-
ment in connection with these operations. These bills, dated August 22d, represented the first public issue of securities for financing the war.

To obviate the risk of transporting gold across the ocean it was allowed to accumulate for account of the Bank of England in America at Ottawa, in South Africa at Cape Town, in Australia and in India. Credits were granted by the Bank against such deposits.

## The Stock Exchange Loans

These matters having been arranged it was necessary to protect the Stock Exchange situation. On October 31st Government measures of assistance were announced. These provided for the extension of bank loans to members of the Stock Exchange, until a year after the war, and with no increase in margin. Other lending institutions not able to give such long credits were permitted to obtain advances from the Bank of England on Stock Exchange securities up to 60 per cent of their value on July 27th. Such loans also were to run until a year after the war.

## Advances to Export Merchants

On November 4th, a very interesting arrangement was made between the Government, the banks and the Association of Chambers of Commerce of the United Kingdom to promote the export trade. To solvent traders were to be advanced funds equivalent to 50 per cent. of moneys owing to them by debtors resident abroad, these advances to be used by the traders to continue their business and pay their commercial debts to other traders and manufacturers. It was understood that the moneys provided were not to be taken by the banks to reduce loans or overdrafts or to pay bank
acceptances but were to be solely a new credit free for meeting the purely trade obligations of the borrower and in pushing his business as rapidly as possible. Any loss was to be borne, 75 per cent. by the Government and 25 per cent. by the accepting banks.

Similarly, the cotton trade was encouraged. On November 16th the Government arranged a fund to be used to enable borrowers to meet market differences. The payment of the advances was guaranteed as to 50 per cent. by the Government, 25 per cent. by the Liverpool Cotton Association, and 25 per cent. by the lending bank.

## Success Attending These Efforts

Such were the principal emergency measures taken during 1914 to insure as nearly as possible an uninterrupted progress of the banking and mercantile community. Although the moratorium was not formally declared ended until November 4 th, we have the word of Sir Edward Holden as authority that actually, as far as the banks were concerned, "they came from under it" in September. The year closed with a heavy increase in deposits and with a large increase in the gold reserve of the Bank of England which after dropping from $\mathcal{L}_{4} 0$ million on July 1 sth to $£_{27}$ million on August 8 th, became $£ 69$ million December 3oth. So that the proportion of reserve to liabilities after dropping from $521 / 4$ per cent. in July, to $14 / 6$ per cent. in August, increased to $333 / 6$ per cent. on December 30 th. At the close of the year money was a drug on the market-three months bills being quoted at 235 per cent.

At the close of 1914 it was estimated that some $\mathrm{E8}_{4}$ million of special loans of various kinds were being carried for the Government by the Bank. This total included pre-
moratorium bills, advances to traders and others after the expiration of the moratorium, sums lent on Stock Exchange securities, and so on. In addition, were the amounts being carried by the joint-stock banks.

## Chapter III

## War Costs and How They Were Met

(1914-1920)

HAVING reviewed the financial measures adopted at the beginning of the war to save the general business situasion, and especially to protect the banks, let us turn to 2 consideration of the direct financing of the requirements of the Government itself. The immense figures involved are a matter of common knowledge. They are summarized as to the classes of expenditures and as to sources of receipts in the tabular atatements printed below. These will be found to repay careful study.

We may now consider the financial methods used.

## Infation Methods Used

It must be frankly admitted that the expenses of the war were financed by inflation methods. Not, however, the same kind of inflation practised by all the Continental nations of immense issues of bank notes. England did issue non-interest bearing circulating notes-the Currency (Treasury) Notes already mentioned-but the aggregate of $\mathfrak{£}_{356}$ million outstanding at the close of 1919 looks very modest alongside of the billions of notes issued, for example, by the Bank of France. The inflation was of a more subtle kind but perhaps even more potent. It was inflation by the use of bank deposit credit.

## Treasury Bills

Our friend the Treasury Bill-successor to the Exchequer Bill of former times-and advances from the Bank of England on the credit of Ways and Means were the principal agencies used by the Government to transmute bank deposit credit into ships, aeroplanes, tanks, ordnance, munitions, food and clothing for the soldiers, separation allowances for their families and finally into a crushing defeat of the enemy.

## Taxation

But the entire dependence has not by any means been placed upon this modern Alladin's lamp. Taxes have steadily increased. Where in the first year of the war they amounted to less than $£ 200$ million, they have since then mounted year by year until in the fiscal year ended March 31, 1920, they yielded nearly fr $_{1}, 000$ million! The principle upon which taxation has been based has been that the revenue receipts should at least provide for the ordinary peace budget and in addition for the interest upon the debt and for an annual sum to be applied to its reduction. This ideal has been fully realized and a good surplus in addition to apply toward the payment of the military and other special expenses caused by the war. The provision of a sinking fund, while the debt was a growing one, may be criticised as chimerical but doubtless it served a useful purpose as a fund to regulate the market for the war bonds; also the fact that, at the time of incurring the debt, provision was made for its ultimate payment probably had a real value in establishing confidence in the obligations of the nation. During the six years under
review the income from taxation and from non-tax revenue, other than that from borrowings provided approximately for 35 per cent. of the first year's disbursements, 22 per cent. of the second year's, over a quarter of the third and fourth year's disbursements, over a third of those of the fifth year and for more than 80 per cent. of last fiscal year's expenses.

## Expenditure of War Period

The total expenditure for the six years of the war periodthat is, for the fiscal period beginning March 31, 1914, and ending March 31, 1920 aggregated $\AA_{11,268}$ million. Of this wartime expenditure $£_{3,605}$ million was met from normal revenue receipts; $£_{4} 66$ million from war contributions, receipts from sales of war property and receipts from trading undertakings; while $£ 7,196$ million came from borrowing, or in the proportions of 36.13 per cent. from revenue of all kinds and 63.87 per cent. from borrowing. Truly stupendous figures and a creditable result and one which gives great confidence to the investor in the nation's bonds. All classes of taxation have been made to contribute to this result, but the great dependence of the Exchequer has been placed upon the property and income tax and its modern running mate, the excess profits duty. Englishmen and their newspaper editors delight in heckling and finding fault with the Administration, as we would say; the Government, as they say. But to the observer 3,000 miles away, quietly studying the figures without any other object than to get at the facts, the results achieved seem little short of marvelous. They could only be obtained in a country where patriotism runs so high that the people demand to be taxed and taxed heavily, as we are assured was the case in England during the course of the war. The following comparative tables of
income and expenditure for the six fiscal years 1914 to 1920 , inclusive, summarize these data:

> GOVERNMENT INCOME-WORLD WAR PERIOD
> March 31, 1914 to March 31, 1920
> In Millions Sterling

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Years Ended March 3 I \& 1915 \& 1916 \& 1917 \& 1918 \& 1919 \& 1920 \& Total \& \[
\begin{gathered}
\text { Aver- } \\
\text { age }
\end{gathered}
\] \& \begin{tabular}{l}
Per \\
Cent. \\
Total \\
Revenue
\end{tabular} \\
\hline Exchequer balance \& 10 \& 83 \& 26 \& 26 \& 2 I \& 13 \& 10 \& \& \\
\hline \begin{tabular}{l}
Tax Revenue \\
Customs \\
Excise \\
Estate duties \\
Stamps \\
Land, house, etc. \\
Property and income, including super-tax \\
Excees Profits
\end{tabular} \& \[
\begin{array}{r}
39 \\
42 \\
28 \\
8 \\
3 \\
\hline 69
\end{array}
\] \& \begin{tabular}{r}
60 \\
61 \\
\(3 I\) \\
7 \\
3 \\
\\
\(\times 28\) \\
\hline\(* *\)
\end{tabular} \& 71
56
31
8
3
205
140 \& 71
39
32
8
3
240
220 \& \[
\begin{array}{r}
103 \\
60 \\
30 \\
12 \\
3
\end{array}
\] \& 149
133
41
23
4

359
290 \& 493
392
193
66
18

1,292
935 \& 82
65
32
17

3 \& | 12.06 |
| ---: |
| 9.59 |
| 4.72 |
| 1.63 |
| .45 |
|  |
| 35.72 |
| 23.01 | <br>

\hline Total Tax Post-office tSundry \& 189
29
8 \& 290
34
13 \& 514
34
25 \& 613
35
59 \& 784
40
65 \& 999
44
296 \& 3.389
216

466 \& $$
\begin{array}{r}
565 \\
36 \\
77
\end{array}
$$ \& \[

$$
\begin{array}{r}
83.18 \\
5.35 \\
11.51
\end{array}
$$
\] <br>

\hline Total revenue Borrawing net \& $$
\begin{array}{r}
286 \\
410
\end{array}
$$ \& \[

$$
\begin{array}{r}
387 \\
1,167
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
573 \\
1,689
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
707 \\
\mathbf{1 , 9 8 5}
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
889 \\
1,689
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
1,339 \\
898
\end{array}
$$

\] \& \[

$$
\begin{aligned}
& 4,071 \\
& \mathbf{7 , 1 9 6}
\end{aligned}
$$

\] \& \[

$$
\begin{array}{r}
678 \\
1,199
\end{array}
$$
\] \& 100.00 <br>

\hline | Total net receipts |
| :--- |
| Total resources | \& \[

$$
\begin{aligned}
& 636 \\
& 646
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 1,504 \\
& 1,587
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 2,209 \\
& 2,228
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& \mathbf{2 , 6 9 8} \\
& \mathbf{2 , 7 1 8}
\end{aligned}
$$

\] \& 2,571 \& \[

$$
\begin{aligned}
& 1,662 \\
& \mathbf{x}, 675
\end{aligned}
$$

\] \& \[

\left\lvert\, $$
\begin{aligned}
& 11,267 \\
& 1 \mathrm{I}, 277
\end{aligned}
$$\right.
\] \& 1,878 \& <br>

\hline Revenue \% Receipts Borrowing \% Receipts \& | 35.53 |
| :--- |
| 64.47 | \& \[

$$
\begin{aligned}
& 22.40 \\
& 77.59
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 26.02 \\
& 73.98
\end{aligned}
$$

\] \& \[

$$
\begin{array}{r}
26.26 \\
73.74
\end{array}
$$

\] \& \[

$$
\begin{aligned}
& 34.58 \\
& 65.42
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 80.56 \\
& 19.44
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 36.13 \\
& 63.87
\end{aligned}
$$
\] \& \& . <br>

\hline
\end{tabular}

*) Ex40,000. $^{2}$
$\dagger$ Including war contributions from India, and other over-seas colonies and depen dencies; also receipts from sales of war property and from trading undertakings, etc.

## COVERNMENT EXPENDITUREPERIOD OF THE WORLD WAR

March 31, 1914 to March 31, 1920 In Millions Sterling

${ }^{\circ}$ Dividion of expeness party cotimated.

## Six us. 226 Years' Expenditure

To grasp the full significance of these figures we may advantageously compare them with the cost of government for a previous period. In endeavoring to make such a comparison we have brought out the starting fact to which reference has already been made that the expenditure of the six years of the war exceeded the aggregate expenditure of the preceding two and à quarter centurics. The table following visualizes this statement. In looking at the figures bear in mind that during the long period of 226 years there were eight major wars, fought at great expense-expense so great that the thinking people of the times were appalled thereby. Besides these major wars there were many costly military
expeditions, the growing cost of civil government and the ever present burden of the public debt. Here are the figures:

# GOVERNMENT EXPENDITURE <br> In Millions Sterling 

|  | Civil Govt. | Military | Debt Charge | Total |
| :---: | :---: | :---: | :---: | :---: |
| 21/4 Centuries (1688-1914) | 2,873 | 4,524 | 3,547 | 10,944 |
| 6 Years (1915-1920) | 710 | 9,557 | 1,001 | 11,268 |
| Total (1688-1920) | 3,583 | 14,081 | 4,548 | 22,212 |

This is the burden which German lust for power and territory placed on one only of the antagonists. Fortunately England has the ability to cope even with such a burden, but it will require the co-operative work and savings of more than one generation to liquidate the $£_{7,3} 67$ million of increased debt which the war has left as its aftermath.

## The Budget, r920-1921

On April 19, 1920, Mr. Austen Chamberlain, Chancellor of the Exchequer, presented to Parliament the budget for the current year to end March 31, 192I. In this connection Mr. Chamberlain said: "It is recognized on all hands that the present financial year is of great importance in the history of Eutope, and not least for those nations who emerged victorious. Eighteen months have elapsed since the preliminaries of peace were signed. Though peace follows on limping footsteps the time must come when each of us should set his house in order, and, not content merely with facing present necessities, lay broad and deep the foundations of future credit and prosperity. This budget is, therefore, a critical one. The paper in the hands of members gives details of the result of the past financial year."

The paper referred to by Mr. Chamberlain is the financial statement always laid before the House by the Chancellor of the Exchequer when opening the budget. The budget system of Great Britain is described in a subsequent chapter. As we have already surveyed the finances for the past year we may proceed at once to consider the estimates for the current year to end March 31, 1921.

These contemplate a total expenditure of $£_{1,1} 8_{4}$ million and receipts of $\mathcal{E}_{1,4} 18$ million. The budget provides for expenses of $£_{481}$ million less than the actual expenses of last year and for an estimated increase in revenue from all sources except borrowing of about $\mathcal{E}_{79}$ million or an improved status of the finances as compared with the past year of $£_{560}$ million. Therefore, while the financing of the past year resulted in a deficit of $£_{3} 26$ million, most of which had to be made up by new borrowing, it is expected that in the current year there will be a surplus of $\boldsymbol{£} 234$ million which can be applied to the reduction of indebtedness.

In order to accomplish this result Mr. Chamberlain announced that it would be necessary not only to continue the unpopular excess profits tax of 40 per cent., but to increase this tax to 60 per cent. In this connection Mr. Chamberlain said: "I base my justification for the proposal on the continued prevalence of temporary conditions occasioned by the war and arising out of the war creating a condition of scarcity hardly distinguishable, in effect, from a monopoly, thus giving to capital engaged in industry wholly abnormal and often extravagant profits." Mr. Chamberlain then made the following significant reference to the proposed levy on war capital. He said: "The qualification to which the increase is subject is this: The House is aware that a Select Committee of this House is now inquiring into the practicability
of a levy on war increases of wealth. If, when they have completed their deliberations, Parliament should decide later on to impose such a levy, the fund thus available would relieve the pressure of the financial situation, enabling us to reverse the decision to increase the rate of Excess Profits Duty to $60 \%$. I should therefore propose to submit to Parliament a bill later in the year to make a levy on increases of war wealth to cancel this increase in the rate of Excess Profits Duty and to collect Excess Profits Duty for the year at the existing rate of $40 \%$.
"The increased revenue to be derived from this source in the current year on the assumption that the rate is $60 \%$ will be only $£_{\text {ro million, raising the estimate of the total revenue }}$ from this source from £2ro million to $£ 220$ million. More important than the additional £1o million actually received will be the further sums accruing but not collective during the present year amounting to $£ 65$ million next year and to a yet further sum of $£ 25$ million receivable thereafter. In other words, the addition to the tax will produce $£_{100}$ million in all."

The other proposed changes in taxation were unimportant compared with the one above referred to. They comprised increased rates on postage and for telegrams and possibly for telephone service, a new tax on motor vehicles instead of the existing taxation and heavy increases in taxation on spirits, wines, beer and cigars. Increased taxes on transfers of stocks are also proposed, while adjustments in the income tax are expected to result in a reduction by $\mathrm{f}_{1} 8$ million. A new corporation tax is also proposed. In concluding his speech, Mr. Chamberlain said: "These changes (in taxation) will produce in the full year $£ 198,230,000, £ 9,500,000$ to be drawn from the Post Office and $£ 189$ million derived as follows:-
from direct taxation $£_{1} 15$ million, from indirect taxation $\mathbf{£ 6 4}_{4}$ million. For the current year they will give me a net additional revenue of $£ 76,650,000$, making a total revenue for the current year of $£_{1,418,300,000}$. At the close of the year we shall have outstanding assets of the following amounts: loans to the Dominions, $£_{1} 19,500,000$, loans to allies and for relief, $\mathfrak{£}_{1,767}$ million, or taking them as in former years at half that figure, $\mathbf{1 8 8 3 , 5 0 0 , 0 0 0 ; ~ t h e ~ r e m a i n i n g ~ l i a b i l i t y ~ o f ~ I n d i a ~ f o r ~ f i v e ~}$ per cent. war loan, $\boldsymbol{£}_{21}$ million; vote of credit bonds of which a portion may still be required to meet extraordinary charges, $£_{300}$ million; Excess Profits Duty payable after the close of the current fiscal year, $£_{\mathbf{4} 00}$ million. In all, assets of $\mathbf{£ r , 7 2 4}^{\mathbf{7}}$ million.
"In addition there are reparation payments from our late enemies, the amount and times of which cannot yet be fixed. Whatever and whenever they are received they will afford an additional sum for the reduction of debe. Against expenditure, inclusive of sinking fund, of $\mathfrak{£}_{1,184}$ million I provide a revenue of $\mathfrak{E}_{1,4} 18$ million. This gives me approximately $\boldsymbol{£}_{234}$ million for the redemption of debt this year-a sinking fund equal to three per cent. of the total debt. Of this $£ 234$ million over $£ 70$ million would be available for the reduction of the floating debt. As the result of these changes there is every prospect that next year there will be available for the reduction of debt the sum of $£_{300}$ million, of which one-half at any rate will be free for the floating debt. In the event of a normal year when temporary and extraordinary receipts and charges were both terminating and on the assumption that the Excess Profits Tax has also been brought to an end, there will be available for the sinking fund a balance of not less than $£_{180}$ million.
" I am content to say that after such a war as that in
which we have been engaged and after gigantic financial sacrifices this is a position of unexampled and unequalled strain. It is true that to attain it we are obliged to impose fresh taxation and to call for further sacrifices. We may not bring popularity to the Government or to Ministers; but I am proud to say that we have sought in our budget to rise to the level of our great responsibility so that when we render up the seals of office we may leave to our successors an ample revenue and to our country a national credit second to none."

During the course of the debate which followed the presentation of the budget one of the members made the statement that two such budgets would destroy the Empire, to which Mr. Chamberlain replied, "I will not stop to retort that twenty such budgets would redeem the whole of our debt."

## Chapter IV

## The War Debt <br> (1914-1920)

TO return to the subject of the debt. The method pursued was, in the first instance, to secure advances from the Bank of England by book credits-called "Ways and Means Advances"-or to sell Treasury Bills. The sales of Treasury Bills have far exceeded the advances. They have been sold to mature at various periods ranging from three months to a year. At first the Government sold them directly to the Bank of England, then it asked for tenders, then it put them on sale over the counter. When tenders were asked, the bidder stated the tates of interest he was willing to accept. As a rule it has apparently been found more satisfactory to offer the billa at a fixed rate of discount. This discount rate has varied with the market rates for money. The rates offered from time to time may be found by consulting the table printed on page 226.

## The First War Loans

The second step in the process of debt financing was to make, at convenient intervals, issues of long dated bonds from the proceeds of which the Treasury Bills outstanding were reduced or retired, new issues being made again as funds were needed.

It would be tedious to burden our pages with a detailed description of each series of bonds issued. The issues now outstanding will be found described in the National Debt Statement to be found on page 208. However, it will be quite worth
while and of interest to note how the more important loans were taken by the public. The first of these loans was for $£_{350}$ million in three-and-a-half per cents. It was offered in November, 1914, at 95 and was quickly over-subscribed by nearly one hundred thousand applicants. The next loan was offered as four-and-a-half per cents at par in June and July, 1915, and $£ 570$ million were taken by over five hundred and fifty thousand subscribers asking for an average of about $f_{1,000}$ each, while 547,000 subscribers bid through the post offices for $£_{1} 5$ million bonds, an average of $£ 266$ s each. Then there was the Anglo-French 5\% loan placed in the United States in October, 1915, of which England's share was $£_{51}$ million.

## The Foreign Securities Mobilization

Then came, in December, 1915 , the scheme for the mobilization of the foreign investment holdings of the British people and their use to stabilize the American exchanges and to create credits in America against which purchases of munitions and other necessary supplies could be financed. The holders of such securities were asked to sell them or lend them to the Treasury for sale in America or for use as collateral behind issues of dollar bonds to be sold in the United States. The owners of the securities used as collateral received a certificate entitling them to the interest which the loaned securities yielded plus a payment at the rate of one-half per cent. per annum. The Government reserved the right of purchase, in which event the owner was to receive a fair market rate for his bonds or stocks. The response to this request was spontaneous and resulted by the end of 1916 in the acquisition by the Treasury of American stocks and bonds of a par value in sterling of $£_{4} 65$ million, $£_{118}$ million by purchase
and $£ 347$ million on deposit. The entrance of the United States into the field in April, 1917 as an active participant in the conflict put an end to the necessity for further important financing of this kind. The result of the operation was to maintain New York exchange at practically a uniform rate of 84.76\% until March 21, 1919, when the control was removed. Similar operations were carried out for the stabilization of the Dutch and Scandinavian exchanges. For the entire period the total securities purchased amounted to $\mathbf{£} 241^{2}$ million, of which amount $£_{4} 6,600,000$ were purchased by the Bank of England during 1915, prior to the inauguration of the mobilization scheme. The deposits on loan amounted to $£_{4} 14$ million. The latter item included a special deposit of $£ 8$ million by the Canadian Pacific. Thus the total amount of securities dealt with was $£ 655$ million.

## The War Loans in 1917

In January and February, 1917, the $4 \%$ and $5 \%$ War Loan met with an enthusiastic reception, about $£_{1,000}$ million being sold for cash. This time applicants through the Bank, numbering $\mathbf{1 , 0 8 9 , 0 0 0}$, took over $£ 819$ million bonds; about one million applicants through the post-office took nearly $\mathcal{E}_{31}$ million while it is estimated that over four million members of war savings clubs participated in purchases by such clubs of around $\boldsymbol{E}_{20}$ million bonds. Holders of about £131 million Treasury Bills exchanged them for these bonds.

## War Savings Associations

The War Savings Cluba were one of the finest achievements of the war finance. The general idea was adopted in our own country after we came into the war in the form of our W. S. S. with which we are all familiar. In England there
were many group purchasers, neighborhood groups, servant groups, tradesmen groups and the like. Sometimes they pooled their purchases and offered prizes of various kinds. Then when a permanent war loan came out these groups used their organizations to promote the sales of bonds among their numbers.

It is of interest to note that the National War Savings Committee was inaugurated by the British Treasury in February, 1916, on the advice of a Committee presided over by Lord Montagu of Beaulieu. Its immediate functions were:
(I) To educate the public as to the necessity for saving and for the reduction of unnecessary consumption by all classes, and (2) to provide facilities for the small investor to invest in State securities.

War Savings Certificates were immediately issued, and the National Committee proceeded to set up "War Savings Associations". Decentralization being found essential to the scheme, Local Savings Committees were organized throughout Great Britain, a democratic basis therefore being imparted to the scheme from the outset.

By the date of the armistice in November, 1918, there were some eighteen hundred local committees, 14,000 official agents and branches, and 40,000 associations numbering not less than five million members. More than a quarter of a million War Savings Certificates had been sold, and the sum of nearly $\mathfrak{£ 2 O I}^{2}$ million had been invested in the certificates by the public.

From that date to January, 1920, nearly £951/2 million sterling had been subscribed in savings certificates. The average number of certificates sold monthly had been 9 million while the withdrawals were approximately' only ten per
cent. of the total issue. The amount outstanding on January 1, 1920, was f267 million. $^{2}$

At a great gathering in London on January 15, 1920, Austen Chamberlain, the Chancellor of the Exchequer, stated that notwithstanding the success in popularizing the new forms of investment, the old forms had risen to higher figures than they ever attained before. He said that before the war, the deposits in the Post Office and the Trustee Savings Banks were something under $£_{300}$ million while by the end of October, 1919 , they had risen to nearly $£ 800$ million.

Sir Robert Kindersley, director of the Bank of England, to whom, as Chairman of the National Savinga Committee, so much of the success of the whole movement is due, told at this same meeting how the army of voluntary workers for national savings enlisted by the Government from 1916 onwards, had captured the imagination of the great mass of the people. He dwelt upon that innate "apirit of adventure" which has made the British Empire what it is to-day, and which promised to make the movement as big a success in peace as in war time: and emphasized the fact that, out of nearly 400 million War Savings Certificates mold since the inauguration of the movement, 124 million had been disposed of since the armistice.

As far back as the middle of 1917, the Commissioners of the British Treasury appointed a committee to consider facilities to be given to the small investor after the war and in view of the genuine success which the movement had achieved, this committee recommended the permanent continuance of the War Savings Certificate, having regard to the main fact that the habit of saving had been formed by "numerous persons of all classes who had not previously acquired it."

In November, 1918, the Committee on Financial Facilities reported that it was enormously impressed by the great
increase in the number of small investors, and that the policy which had proved so successful during the war must be continued at all costs. It was decided to extend the "life" of a certificate from five years to ten, and that it could be cashed at any time during that period.

Particular attention has been paid, too, to the educational value of the moment. Largely owing to the good work of the educational authorities and of thousands of the teachers themselves, some 12,500 School Associations were set up during the war.

In October, 1919, the Board of Education circularized all the local education authorities, urging upon them the continuance of the war savings movement in schools. To this appeal an absolutely unanimous affirmative was given, and the Na tional Union of Teachers was requested to render support to the National Savings Committee. This the teachers are accordingly doing with all the means at their disposal, and with absolutely unconquerable optimism.

As Sir Robert Kindersley summed it up:
"First of all we had the impetus of the war, the desire on the part of everybody to try and help to win the war-that was the first advantage that we had. But we should have absolutely failed in this movement if we had simply set out as a pure collecting agency of money for the Stare. We had to have behind us a gospel. In fine, it was from the outset a gigantic effort in unselfishness on the part of an entire community, which has seldom if ever been equalled in the history of humankind."

## National War Bonds-Continuous Offering

In the latter part of 1917 and during 1918 and 1919 the Treasury tried the interesting experiment of abandoning
spectacular periodical offerings and, instead, of putting on continuous sale over the country the National War Bonds. The idea was to feed the bonds out from day to day and thus to have a steady flow of money into the Treasury of, say, $£_{25}$ million a day. The bonds were issued as fives subject to taxation, or as fours "income tax compounded." While the expected goal was not reached, yet the sales were very substantial. The amount of the issue outstanding at the close of 1919 was one and a half thousand million sterling.

## Victory Loan of 1919

In June and July, 1919, the Treasury offered what was called the "Victory Loan" at 85, and in conjunction therewith the "Funding Loan" at 80 . These loans bore $4 \%$ interest. Some $£_{77} 6$ million bonds were sold.

## Summary

The funded and unfunded debt as of December 31, 1919, when the debe had reached its maximum, was $£ 8,078$ million held by over $17,000,000$ investors. This compared with a debt of $£ 711$ million on August 1, 1914, held by about 345,000 investors. At the close of the fiscal year, March 31, 1920, the debe stood at $£ 7,973$ million, a beginning having at last been made toward its reduction.

In the following table the debt is summarized according to dates of maturity. It will be noted that about one-fifth of the debe matures within one year and about another fifth within five years.

# NATIONAL DEBT <br> Funded and Unfunded as of December 31, 1919 

Per
Million Tont of


Due Within One to Five Years
Exchequer Bonds. . . . . . . . . $\mathbf{1 4 6 , 4}$
Victory Bonds . . . . . . . . . . 20,1
Annuities . . . . . . . . . . . . 8,2
War Savings Certificates . . . . . 267,3
Debt in United States. . . . . . . 48,5
Debt Due to United States Govt . . 867,4
Other debt due to war-due Foreign
Nations and to Dominions . . . 329,8
Due Within Five to Sixty Years:
Exchequer Bonds. . . . . . . . . 16,6
Victory Bonds . . . . . . . . . . 334,4
National War Bonds . . . . . . , $\mathbf{1}, 508,8$
War Loans . . . . . . . . . . . 2,122,6
Debt in United States. . . . . . . 60,0
Funding Loan . . . . . . . . . . 409,1
4,451,5 55.11

## Perpetual

Annuities for life and term of years . 11,8
Consols
301,4
Debts due to Bank of England . . . 11,0
Debts due to Bank of Ireland . . . 2,0
Miscellaneous:
Other Capital Liabilities
$\frac{46,2}{8,078,7} \quad \frac{.57}{100.00}$

The outstanding Treasury Notes, amounting on December 31, 1919, to $f_{356}$ million, must not be overlooked in considering the debt. However, as to the extent of $£ \mathbf{3 2 , 5 0 0 , 0 0 0}$
they are covered by gold and Bank of England notes and for the rest by Government interest-bearing securities which are presumably included in the debr statement, they probably need not be added to the above total of $£ 8,078$ million in order to determine the aggregate debt.

## Proposed Debt Reduction

The British Government are fully alive to the necessity for reducing the debt as promptly as possible and particularly for making provision for the debt having early maturities. We have already noted in connection with the discussion of the budget for the current fiscal year that during this year the Government purpose to reduce the indebtedness by the sum of $£ 234$ million. The London Joint City \& Midland Bank in their monthly review for April, 1920, estimate that possibly as much as $£_{300}$ million may be available for debe reduction. On account of the importance of this matter we quote their remarks in full:
"If expenditure and revenue for the current year fulfill budget eatimates the surplus will be about 234 millions. Out of this surplus the Chancellor estimates that about 160 millions will be required for the Victory Loan Sinking Fund, for cancellation of debt through revenue payments in scrip, for the Depreciation Fund on the 1917 War Loans and for provision to meet old debe (mainly external) maturing in 1920-1921. The balance of $£_{74}$ millions is to be applied to reduction of floating debt. In arriving at this figure the Chancellor has apparently not taken into consideration repayments of $361 / 2$ millions on account of Civil Contingencies due before September 30, 1920, or the proceeds of sales of Savings Certificates during the financial year. We show in the appended statoment that if receipts on account of Civil Contingencies and

Savings Certificates are included, there may be a balance of 155 millions available for the repayment of Treasury Bills and Ways and Means Advances, after making provision for the repayment of $\mathbf{2 5}$ millions of Exchequer Bonds in December next.

## ESTIMATED CHANGES IN DEBT, 1920-2I (ooo omitted)

> Cr.


Victory Loan Sinking Fund . . . . . . . $£_{3,840}$
Cancellations through Death Duty Payments: Victory Loan . . 10,000 Other War Loans . 5,000
Cancellations through Excess Profits Duty payments . . . . . 60,000
$4 \%$ and $5 \%$ War Loan Depreciation Fund : 31,920
Repayment of Old Debt *(mainly external). . 49,240
£160,000
5\% Exchequer Bonds due Dec. I, $1920 \cdot \frac{25,378}{\text { £185,378 }^{2}}$

Available for repayment of Treasury Bills and/or Ways and Means Advances . . 115,150
$\overline{£_{300,528}}$
*Presumably the Anglo-French Loan. H. E. F.
If the above estimates prove to be correct the amount of debt outstanding on March 31, 1921, will be about $£ 7,565$ millions."

## Refunding Operations

The Chancellor of the Exchequer announced on April 28th his intention to place on sale, as of May 3d, a new series of Treasury Bonds with the avowed object of reducing the floating debt of early maturity. The amount of bonds to be issued is unlimited and they will be on sale at the Bank of England until further notice. The principal and interest of the bonds are chargeable on the Consolidated Fund. The bonds will be repayable on the first of May, 1935, or on the first of May in any one of the years 1925 to 1934, inclusive, at the option of the Government or of holders of the bands, on notice having been given by the Treasury or the holders during the month of April in the year preceding that in which such repayment is to take place.

A novel plan is proposed in regard to payment of interest. We quore from the official circular:
"The bonds will carry interest at the rate of 5 per cent. per annum payable half-yearly on the ist May and ist November and subject to the conditions stated below, will carry additional interest payable during the period ending ist May, 1925, as follows: If and when during any half-year ended ast May or ist November, the Treasury Bills issued to the Public were sold to them at an average rate of discount (as certified by the bank of England) exceeding $51 / 2 \%$ and under $61 / 2 \%$ per annum, additional interest will be payable on the interest date next succeeding such ist May or ist November at the rate of 1 \% per annum. If and when such average rate of discount was $61 / 2 \%$ per annum or over additional interest will be payable at the rate of $2 \%$ per annum.
"The first interest payment, payable ist November, 1920, will represent in the case of each bond interest to that date
from the date on which the application was lodged ind payment made for the bond, and will include additional interest at the rate of 2 per cent. per annum.

An announcement will be published in the London Gazette on or about the 2nd November, 1920, and thereafter halfyearly until the 2nd November, 1924, of the rate at which Additional Interest (if any) will be payable on the next succeeding interest date."

In the opinion of the Chancellor, the novel feature in regard to the payment of interest will probably protect holders against depreciation in market values when short-term money rates are high and also prevent the new issue of bonds from causing further depreciation of market values of the older issues. The maximum possible average yield from the new bonds if held until 1935 would be $£_{5} 1754 \mathrm{~d}$ per cent.' At the time of issue $31 / 2 \%$ War Loan was selling to yield $£_{7} 3 \mathrm{~s} 7 \mathrm{~d}$ per cent.; $41 / 2 \%$ War Loan $£ 67 \mathrm{~s}$ 6d per cent. and $5 \%$ War Loan, $£ 65 \mathrm{~s}$ id per cent., therefore the success of the new issue was considered problematical. However, the Government is so fully alive to the importance of liquidating or funding the floating debt and the debt of early maturity that any modification of present plans necessary to insure this result may confidently be expected.

## Credits to Debt Account

The debt on March 31st, 1920, of about $£ 7,973$ million was offset by advances of $£ 1,851$ million; say to the Dominions of $£_{120}$ million and to allied governments of $£_{1,731}$ million.

The following itemized statement is taken from the finan-
cial statement already referred to laid before the House upon the opening of the budget:

## LOANS TO DOMINIONS AND ALLIES <br> March 31, 1920 <br> (00,000 omitted)

Obligationa of Dominions:
Auseralia . . . . . . . . . . . . . . . . E5s,6 $^{5}$
New Zealand . . . . . . . . . . . . . . 29,6
Canada . . . . . . . . . . . . . . . . . 19,4
South Alrica . . . . . . . . . . . . . . 15,8
Oiber Dominione and Colonies . . . . . . . 3.1
£119,5
Obligatione of Allics:
Rumia . . . . . . . . . . . . . . . . . £568,0 $^{\mathbf{5}}$
France . . . . . . . . . . . . . . . . . 514,8
Italy . . . . . . . . . . . . . . . . . . 455,5
Belgium (a) War . . . . . . . . . . . . 92,0
(b) Reconstruction . . . . . . . . 5.3

Serbia. . . . . . . . . . . . . . . . . . 20,9
Portugal, Roumania, Greece and other Allies. 66,6
Relief Loans . . . . . . . . . . . . . . . 8,0
$\frac{\mathbf{E 1 , 7 3 1 , 1}}{\boldsymbol{1 1 , 8 5 0 , 6}}$

Further advances of $£ 36,000,000$ provided for in the estimates 1920-21, will raise this total by March 31st, 1921, to approximately $£_{1}, 886$ million,

Mr. Chamberlain in his budget speech estimated the advances to the allies as probably realizable at about fifty per cent. of their face value. This would afford an offset of about $\mathrm{f}_{1,000}$ million against the gross debt.

It is understood that no interest has been charged on the pre-armistice debt of Belgium, Serbia and Montenegro. It is understood that in the case of Belgium, the French, American and British Governments have agreed to accept German bonds for the amount of Belgian indebtedness. In other cases interest is calculated either at 5 per cent. or at Bank rate and is added to the principal of the loans outstanding, so that no payments of interest on pre-armistice debt have been received by the Exchequer except in respect of a single transaction where special arrangements were made. Negotiations as to the future treatment of the debts of the allied and associated governments are proceeding and the Government have expressed their willingness to extend to their debtors similar treatment to that which may be arranged in respect of their own debt.

## The Comparative Burden of the Debt

Assuming, then, about $£_{1, \infty 0}$ million to be realizable from debtor nations and the Dominions the net indebtedness of the nation on March 3I, 1920, may be placed at £7,000 million as against national wealth estimated at perhaps $£ 24,000$ million; a ratio of about $30 \%$ net debt to national wealth. The debt charge of, say, $£_{3} 60$ million compares with estimated national income of about $£ 3,600$ million. Therefore the debt of to-day bears about the same relation to wealth that the debt at the close of the Napoleonic wars bore to the estimated wealth at that time. The interest charge now, at $10 \%$ of the income, compares with $8 \%$ in 1817 .

In the table printed on the opposite page further interesting comparisons are made with conditions at the conclusion of the Boer War and on August 1, 1914, just before the recent war began.

## THE BURDEN OF DEBT AT FOUR IMPORTANT PERIODS COMPARED

In Millions


The changee in the relative purchasing power of money at these periods muat not be overiooked. The actual burden per caplta e century ago probably much more nearly approzimated the prement day clatus than the money figurea indicate.
 the wer pertod.

The great progress in the past century in science and in its application to the arts enabled Great Britain to expand her business and increase her capital at such a rate as to steadily reduce the burden of the debt in comparison with national income and resources.

It is impossible now to determine just what the future may have in store to mitigate the present day burden. The wonderful developments in air navigation during the war and the great importance which the chemical industries assumed during that period may afford a hint of surprises in store which will assist in lightening to-day's burden. Potent factors in assisting Great Britain to create new assets to balance her war liabilities will be the closer knitting together of the Empire, the further colonial development in Mesopotamia and in Africa, and redoubled efforts to extend her commerce, especially in Russia and the Far East. Lessons in efficiency taught by the war and a larger use of machinery, doubtless will also play an important part in the developments of the future.

## Chapter V

## How the Banks Helped Finance the War (1914-1920)

FOR the benefit of those who are not familiar with banking operations in England and the United States it may be explained that, as a usual thing, every loan made by a bank results in an increase in the deposits of the bank or of some other bank. If a merchant or manufacturer or other business man borrows at his bank he usually has the amount of the loan credited to his account. The result is that an increase in bank loans is nearly always accompanied by an increase in bank deposits. Therefore, an increase in the deposits of a bank is not necessarily, as is often thought, an index of the increasing wealth of a community but often merely of increasing business activity, or simply of credit expansion. If the increase in loans and consequent increase in deposits is brought about by unproductive borrowing, this gain in deposits may be a uign of financial weakness rather than an indication of growing wealth.

The war financing in England and in America was effected by the use on a large scale of this familiar process of everyday banking. Each loan issued by the nation increased the loans as well as the deposits of the banks. This was due in large part to the fact that in many instances the purchasers of government obligations borrowed from their banks in order to obtain the funds with which to pay the Government. These loans created deposits against which cheques were drawn to the order of the Government-that is, in England, to the order of the Bank of England. The actual payment
might have been to the order of one of the joint-stock banks, but ultimately the money would reach the Exchequer through the Bank of England. The Government would then draw upon this deposit to pay its expenses for munitions, for food and clothing for the enlisted men and for the hundred and one other needs of a nation in a time of war.

## Bank Reserves vs. Credits

The extent to which a bank can extend credits to its customers is determined by its reserves, in England often called cash balances. As a result of long experience bankers have found that on the average only a certain percentage of their deposits is drawn upon; the balance remains more or less as a fixed deposit. This balance can be safely loaned to the business community, but a reserve in the form of actual money or its equivalent must always be held, out of which the cheques of depositors can be promptly met.

Such a fund is a prime essential of solvency. In England the banks have established the custom instead of holding all of this reserve in actual money, of keeping the greater part in the form of a deposit with the Bank of England. In the United States the member banks of the Federal Reserve System, which comprise all of the National Banks and most of the large State banks, are required to carry their legal reserve with the Federal Reserve Banks. The experience of banks as to the amount of reserve which must be held varies with their location, the nature of the business done by their clients, the season of the year and other conditions. In general, it is found that for commercial banks (other than central banks of issue) a reserve of from ten to twenty per cent. of deposits is ample in normal times. That is, if the English banks have on hand in gold, Bank of England notes, and/or deposits with the

Bank of England, say, £1oo million, they can safely maintain their credits-that is, their deposits, which result chiefly from loans, at from $£_{500}$ to $£_{1,000}$ million.

## How the Government War Loans Were Financed

If this point has been made clear we are now in a position to understand how banking methods were applied to the war financing.

In the case of the large loans, it was customary to divide the payments into several installments spread over a period of weeks. The reason for this arrangement will be apparent when the process of settlement is considered.

The amount which the banks could conveniently handle in one payment was determined by their reserve which consisted chiefly of their deposits with the Bank of England.

The process of payment was likened by the late Chairman of the London Joint City and Midland Bank, Sir Edward H. Holden, to the revolutions of a wheel.
"The banks place in the whel the payments they make for those customers who have subscribed for the loans; the wheel carries these payments to the credit of the Government with the Bank of England, and the subscribers receive their securities; the Government then places in the wheel cheques, in payment of commodities received and services rendered, for conveyance to their creditors, and the creditors then use the wheel to carry these cheques to the credit of their accountes with their banks, which reeestablishes the banks' reserves and prepares them for another installment." In the case of Treasury bills, and other securities sold from week to week in relatively small amounts, the revolution of the wheel was rapid enough to keep pace with the new borrowing, but in the case of the large loans it was found advisable to break up
the payments into installments, so that each installment might have time to get through the Bank of England, through the business firms and back into the banks before another installment was required.

One method by which the banks developed an ability to finance the stupendous needs of the Government was through a utilization of the credit facilities of the Bank of England. To increase their clients' ability and their own ability to invest in Government issues they would borrow of the Bank of England. These loans would increase their deposits with the Bank of England which as reserves would increase their ability to grant to their own clients loans equivalent to, say, five times such deposits.

## Ways and Means Advances

Another and most important way in which the banks were used to finance the war was through the creation of direct credits by the Bank of England in favor of the Government. These credits are known as "Ways and Means" advances. How the Government benefited by these advances and how they operated to create credits with other banks we will allow Lord Cunliffe's "Committee on Currency and Foreign Exchanges after the War" to tell us.

In their final report laid before Parliament in December, 1919, the Committee draw attention "to the extensive use made during the war of the system of ways and means advances from the Bank of England" and then go on to say: "The powers given to the Government by Parliament to borrow from the Bank of England in the form of an overdraft on the credit of Ways and Means were, as the name implies, intended to enable the Government to anticipate receipts from revenue or permanent borrowings for a brief period only. In-
deed, Parliament, by expressly providing that all such advances should be repaid in the quarter following that in which they were obtained, showed that it had no intention of bestowing upon the Government the power of securing an overdraft of indefinite duration and amount. Under the exigencies of war finance the Government found it necessary to reborrow in each quarter on the credit of Ways and Means the amount needed to enable them to comply with the statutory requirement that the previous quarter's Ways and Means Advances should be repaid, with the result that the total outstanding advances remained for $a$ long time at a high figure. We are glad to see that efforts are now being made to reduce this overdraft to more moderate dimensions.
"We therefore hope, now that conditions are less abnormal, that the Government will confine its use of Ways and Means Advances from the Bank of England to providing for purely temporary necessities. Such advances afford a legitimate method of tiding over a few weeks' shortage, but are entirely unsuitable for borrowings over a longer period."

In their interim report, submitted in August, 1918, the Committee explain how these advances operated to swell bank deposits and loans: "This process has had results of such far-reaching importance that it may be useful to set out in detail the manner in which it operates. Suppose, for example, that in a given week the Government require £10,000,000 over and above the receipts from taxation and loans from the public. They apply for an advance from the Bank of England, which by a book entry places the amount required to the credit of Public Deposits in the same way $2 s$ any other banker credits the account of a customer when he grants him temporary accommodation. The amount is then paid out to contractort and other Government creditors, and
passes, when the cheques are cleared, to the credit of their bankers in the books of the Bank of England-in other words, is transferred from "Public" to "Other" deposits, the effect of the whole transaction thus being to.increase by $£$ ro,000,000 the purchasing power in the hands of the public in the form of deposits in the joint-stock banks and the bankers' cash at the Bank of England by the same amount. The bankers' liabilities to depositors having thus increased by $£_{10,000,000}$ and their cash reserves by an equal amount, their proportion of cash to liabilities (which was normally before the war something under 20 per cent.) is improved, with the result that they are in a position to make advances to their customers to an amount equal to four or five times the sum added to their cash reserves, or, in the absence of demand for such accommodation, to increase their investments by the difference between the cash received and the proportion they require to hold against the increase of their deposit liabilities. Since the outbreak of war it is the second procedure which has in the main been followed, the surplus cash having been used to subscribe for Treasury Bills and other Government securities. The money so subscribed has again been spent by the Government and retiurned in the manner above described to the bankers' cash balances, the process being repeated again and again, until each $£_{\text {I } 0,000,000}$ originally advanced by the Bank of England has created new deposits representing new purchasing power to several times that amount."
How this process actually worked out is described in the next chapter.

## Chapter VI

## The War Credit Structure (1914-1920)

THE Credit Structure tables to which the attention of the reader is now called are based upon the published returns of the Government and of the banks made nearest to the end of the calendar years 1913 to 1919 inclusive. The purpose is to compare the total liabilities of the nation on account of the debt with the assets of the banks and to compare the currency and the bank deposits with the gold coin and bullion impounded in the coffers of the joint-stock banks and of the Bank of England. The statistical data used are taken from the weekly reports of the Bank of England, from the Cunliffe Committee's reports, from a paper on the Statistical Aspects of Inflation, by Professor J. Shield Nicholson, read before the Royal Statistical Society in June, 1917, from the Banker's Magaxine (London) and from the columns of The Economist and of The Statist.

## The National Debt and Bank Assets

Table I compares the year to year changes in the national debt with the corresponding changes in bank assets. It is somewhat of a surprise that the Bank of England's holdings of Government securities do not more fully reflect the changes in the Ways and Means advances. However, taking the entire debt fluctuations into consideration it is apparent that the assets of the banks have fluctuated with the changes in the debt, and that bank assets have grown as the national debt has grown. It is not possible to make close comparisons because call loans are reported together with cash in hand and

| THE WAR CREDIT STRUCTURE-I |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The National Debt |  |  |  |  |  |  | All other Banks |  |  |  |
|  |  |  |  |  | Bang of England |  |  |  |  |  |
| About <br> Dec. 3 I | Ways and Means | $\underset{\text { Treas'y }}{\text { Bills }}$ | Other | Total | Gov't Securi- ties | Other Securi- ties | Cash and Money at Call and Notice | Invest- ments | Dis- counts and Ad- vances | Total Quick Assets |
| 1913 | 8,5 | 14,5 |  |  | $\begin{array}{rrrr} 13,2 & 52,1 \\ + & 1,6 \\ + & 18,0 & 54, \mathrm{I} \\ + & 24,3 & 5,8 \\ + & 13,7 & 5,6 \\ + & 53,5 & \ldots \\ \hline \end{array}$ |  | $\left\lvert\, \begin{array}{r} 293,6 \\ + \\ \hline \end{array} \mathbf{4 , 0} 1\right.$ | $\begin{array}{r} 191,0 \\ +\quad 34,3 \\ +\quad 196,7 \\ +\quad 17,6 \\ +\quad 23,9 \\ +\quad 56,3 \end{array}$ | $\begin{array}{r} 683,0 \\ +\quad 18,4+167,5 \\ \hline 69,8 \\ \hline \end{array}+117,8$ |  |
| 1914 | 37,0 | + 46,9 |  |  |  |  |  |  |  |  |
| 1915 | - 24.5 | $+334,1$ |  |  |  |  |  |  |  |  |
| 1916 | + 101,0 | + 690,6 |  |  |  |  |  |  |  |  |
| 1917 | + 107,8 | - 28,4 |  |  |  |  |  |  |  |  |
| 1918 | + 176,3 | $+\quad 37,4$ |  |  |  |  |  |  |  |  |
| Total 1918 Change from '13 | 455,1 $+\quad 446,6$ | $1,095,1$ $+1,080,6$ | $\begin{array}{r}5,867,7 \\ +6,166,1 \\ +\quad 7,417,9 \\ +6,693,3 \\ \hline\end{array}$ |  | 124,3$+111,1$+840.9 | $\begin{array}{r} 106,4 \\ +\quad 54,3 \\ +\quad 104.2 \\ \hline \end{array}$ | 611,5 519,8 1025,2 <br> $-317,9$ $+328,8$ $+342,2$ <br> +108.2 $+172 . I$ +50.7 |  |  | $\begin{array}{r} 2,156,5 \\ +989,0 \\ +\quad 84.7 \end{array}$ |
| \% ${ }^{\text {from }}$ Change | $\begin{array}{r}+ \\ + \\ +546,254.1 \\ \hline\end{array}$ | $+1,080,6$ $+7,452.4$ |  |  |  |  |  |  |  |  |  |  |  |
| 1919 |  | + 11,5 | $\begin{array}{\|r\|rr\|r\|} \hline+861,2 & +660,8 & - & 31,8 \\ 6,728,9 & 0,3 \\ \hline 8,078,7 & 92,5 & 106,7 \\ +6,027,3 & +7,354,1 & + & 79,3 \\ +8 & 54,6 \\ +850.0 & +1,014.0 & + & 600.7 \\ \hline \end{array}$ |  |  |  | These figures not yet available. Total quick assets atclose of 1919 must have been about $£ 2,400$ million, an increase of around £1,200. |  |  |  |
| Total 1919 |  | 1,106,6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Change from '13 | 234,7 | 1,092,1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \% Change | $\underline{+2,761.7}$ | + 7.531 .71 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Year to Year Changes In millions sterling, except per capitaitems, which are in f. s. d.

[^1]at the Bank of England. It is probable that some of the banks treat Treasury bills as equivalent to cash, while others treat them as investments or as discounted paper. It is interesting to note that most of the debt of the Government must be held outside of the banks as the entire increase in the asseta of the banks, outside of plant, from the close of 1913 to the close of 1919 amounting to around $£_{1,200}$ million was only about one sixth the increase of the debt. If then we make the unlikely assumption that the entire increase in the assets of the banks is represented by holdings of National debr or loans thereon it is evident that over $£ 6,000$ million of debt has found permanent lodgment with private and corporate investors other than the banks, and that they are not borrowing against such holdings. The probability is that 2 much larger amount is $n$ held as the increased assets of the banks must represent, in addition to Government obligations, large increased holdings of business paper.

## Note and Deposit Currency vs. the Gold Reserves

Tables II and III permit of a year to year study of the growth of the note and deposit liabilities of the banks, which may be said to represent the credit facilities of the nation, and a comparison of this credit structure with the specie reserves.

The interesting conclusion at which we arrive is that in the case of the Treasury Notes, Bank of England Notes in circulation and bank deposits, the percentage of reserve in each instance has fallen. This is especially noticeable in connection with deposits where the estimated effective gold reserve held against all deposits on December 3 ist, 1919, was only 2.3 per cent. While the entire credit structure increased from $£_{1,227}$ million in December, 1913 , to $£_{3,02}$ million in Decem-

ber, 1919, an increase of 144.7 per cent., the specie reserves held increased only from $£ 85$ million to $£_{1} 60$ million, a decrease from 6.9 per cent. of the liabilities to 5.3 per cent.

It is evident that in the diminishing gold reserve and the increasing liabilities, we have a serious situation.

## High Prices and Bank Credits

Present high prices are easily explainable when it is considered that the actual volume of commodities required to support the people of Great Britain is probably no more today, and possibly is less, than it was before the war.

It is doubtful, too, whether the physical volume of trade has increased during the war period. Estimates made for the United States by Professor E. W. Kemmerer of Princeton University show that the physical volume of trade for our country increased from 1913 to 1919 only 9.6 per cent. There is no similar computation available for England, but Professor Kemmerer believes it to be unlikely that the actual increase there in the physical volume of trade during the same years has been as great as in the United States. He thinks that it has been less. If this is true, then it is easy to understand why prices have advanced in the marked manner shown by The Economist Index Number of commodity prices printed below. If the adjustment between the currency and the credie structure and the physical volume of trade is properly made the normal variation in the rise and fall of general prices will not be great. There will be seasonal declines when new crops come in and advances as the bins become empty, but, as a rule, there will be no marked deviation from a general average.

But if the credit atructure is dislocated or if there is an unusual harvest or an unusual demand such as is caused by

## THE WAR CREDIT STRUCTURE-III

In millions sterling, except per capita items, which are in $£$. s. d.

| About December 31 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | Increase Over 1913 | $\frac{\%}{\%}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Against Currency |  |  |  |  |  |  |  |  |  |
| Agt. Treasury Notes Gold. |  | 18,5 | 28.5 | 28,5 | 28,5 | 28,5 | 28,5 | 28,5 |  |
| Bank of England Notes |  | 18,5 | 8. 5 | 28,5 | 28,5 | 28,5 | +4,0 | 4,0 | ... |
| Total held in trust by Bank of England | .... | 18.5 | 28,5 | 28.5 | 28.5 | 28,5 | 32,5 | 32,5 | $\cdots$ |
| Per Ceni. Notes issued |  | 48.1 | 27.6 | 10.0 | 1.3 .0 | 8.0 | 0.1 | .... |  |
| Agt. Bank of England Notes Per Cent. Notes issued | 33.9 64.8 | 69,0 78.9 | 51,3 73.6 | 53,5 74.4 | 58.0 7.5 .9 | 79.3 81.7 | 90,3 83.1 | 56,4 | 166.4 |
| Per Cent. Notes issued | $\begin{array}{r}174.8 \\ \hline 14.5\end{array}$ | 78.9 197.1 | 73.0 145.7 | 74.4 134.1 | 75.9 124.7 | 81.7 13.0 | 83.1 98.0 | $\cdots$. |  |
| bAgt. Scotch Banks Notes | 6,7 | 8,5 | 11,7 | $\begin{array}{r}14.7 \\ \hline\end{array}$ | 18,6 | 25.5 | 28, | 21.4 | 360.6 |
| bAgt. Irish Banks Notes | 4,6 | 8,1 | rn,9 | 14,9 | 18,5 | 26.9 | 25.8 | 21,2 | 460.8 |
| Against Deposits |  |  |  |  |  |  |  |  |  |
| cBank of England | 23,8 | 51,8 | 34,6 | 33.5 | 31,0 | 28.2 | 18,4 | -5.4 | - 18.0 |
| Per Cent. deposits | 33.3 | 33.4 | 21.4 | 19.7 | 16.2 | 11.7 | 9.2 | ..... | . . . |
| dOther Banks - | 30,0 | 40.0 | 40,0 | 40,0 | 40.0 | 40.0 | 40,0 |  |  |
| All Banks Per Cent depinsits-all Ba | 53.8 | 91,8 | 74.6 | 73.5 | 71,0 | 68,2 | 58,4 | -5.4 | -6.8 |
| Per Cent. depnsits-all B | 4.9 | 7.1 | 5.3 | 4.5 | 3.7 | 3.7 | 2.3 |  | .... |
| Total Specie Reserves |  |  |  |  |  |  |  |  |  |
| Bank of England Notes and deposits | 34.9 34.6 | 69.4 36.3 | 51.4 26.1 | 54,3 25.9 | 59,1 24.9 | 79.9 25.7 | 91.3 37.8 | 56.4 | 161.6 |
| fOther Banks . . . . . . . . | 50,0 | 40,0 | 40,0 | 40,0 | 20,0 | 40,0 | 40,0 | -10,0 | -20.0 |
| All Banks ${ }^{\text {P }}$ | 84,9 | 109,4 | 91.4 | 94.3 | 99, 1 | 119,9 | 131,3 | 46.4 | 54.6 |
| Per Cent, Bank Notes (net) and deposits | 7.4 | 7.0 | 0.3 | 5.7 | 5.1 | 5.2 | 4.9 |  |  |
| Treasury Notes-Reserve . |  | 18.5 | 28,5 | 28.5 | 28.5 | 28,5 | 28,5 | 28,5 | $\cdots$ |
| Specie Reserve-Total gPer Cent. Credit Structure | $\begin{array}{r} 84,9 \\ 6.6 \end{array}$ | 127,9 0.0 | 119.9 7.7 | 122.8 6.7 | 127.6 5.0 | 148,4 5.6 | 159,8 5.3 | 74,9 | 88.2 |
| aNoles in Circulation i. e. Net Notes (viz.: Notes issued less Notes in B'k'g. Dep't and held agt. Treasury Notes) <br> bGiven as specie in monthly reports but probably chiefly Treasury Notes:-after 1913. <br> $c$ Treating notes held in banking dept. as equivalent to coin. <br> $\boldsymbol{d}$ Based on estimate in Cunliffe Committee's Report. <br> eInteresting only as an indication of form statement would take if reserves were consolidated. <br> fTaking only estimated actual specie holdings - See $b$ <br> $g$ The percentages in 1913 and rgi4 are of course figured <br> only against net rote circulation and deposits. <br> $\dagger$ Treated here as specie. |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

war then the price level will reflect these conditions. Let us see what happened between 1913 and 1920 . Taking the price index of December 31, 1913, as 100 we find that in 1915 prices rose 38 per cent. above the base. During the height of the war, in 1916, 1917 and 1918, they averaged over twice the base price, but with the war over they kept soaring and by the close of 1919 they were nearly three times the prewar prices.

Here are the figures:

## ECONOMIST PRICE INDEX



As one measure of inflation we may profitably study the comparative volumes of imported goods and their values at the custom house. There is no common denominator of quantities. Some things are measured by tons, others by pounds and others still by numbers. Although we cannot add together all of the commodities imported and largely consumed at home, we can select certain of the more important commodities and take their testimony. This we have done in the following table.

# ONE EVIDENCE OF INFLATION <br> Quantities and Values of Imports Compared (In millions) 

| Calendar Year | 1913 |  | 1918 |  | 1919 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantities | Value | Quantities | Value | Quantities | Value |
| Wheat, cwts. . | 105 | $£_{44}$ | 58 | $£_{53}$ | 71 | 168 |
| Beef, cwts . | 9 | 16 | 7 | 36 | 6 | 30 |
| Sugar, lbs: | 39 | 23 | 26 | 34 | 32 | 54 |
| Tea, lbs. | 365 | 14 | 463 | 29 | 510 | 34 |
| Cotton, cwts | 22 | 70 | 15 | 150 | 19 | 190 |
| Wool, lbs. . | 800 | 34 | 413 | 36 | 1,042 | 97 |

Thus we see that the quantities of wheat, beef, sugar, cotton and wool imported in 1918 were materially less than the quantities imported in 1913 and yet the money values were greatly higher. While in 1918 and 1919 the imports of tea, and in 1919 the imports of both tea and wool, exceeded in quantity the imports of 1913, yet in every case the relative money values of the imports is materially greater than the values of 1913. Could there be a better illustration of the manner in which a disproportionate increase in the credit structure leads to increases in prices?

The imperative need for a firm handling of the credit situation is apparent. Not only in England, but in all other countries, the world over, must there be practised drastic economies in government expenditures and every effort put forth to meet expenses from taxation. Government borrowing, except for refunding purposes, should cease. At the same time the people must settle down to productive work. Meanwhile it is the obvious duty of the banks to hold speculation in check and gently but firmly to reverse the process of inflation which the war made necessary.

The tables bring out in bold relief the manner in which
bank credits were used to win the war. They also show the dizzy heights from which the business of the world must cautiously descend, before normal conditions nationally or internationally can be resumed.

We may now profitably retrace our steps and consider the history of English public finance from its genesis in Norman days.

## Chapter VII

## Crown Finance <br> (1066-1688)

THE foundations of England's present-day financial structure were laid broad and deep centuries ago. The Exchequer and the Treasury can trace their lineage directly to Norman times, possibly even to the times of the great Alfred himself. There have been a Chancellor of the Exchequer and a Treasurer since the days of Henry II-that is, since the middle of the twelfth century.

Books of account, or rather Rolls of account (for the accounts were written on parchment which was made up in long strips which were rolled up when not in use) are extant from the reign of this king.

The early kings had extensive demesnes from which they derived a large part of their revenue. Aside from this source of income, the receipts of the Exchequer during all of these ages have come from three principal sources-from internal taxation, from customs and from borrowing.

The history of the revenues of England's kings is inseparably bound up with the history of the development of her civil rights. The fight for the control of the purse, first formulated in the terms of Magna Charta, wrung by the barons from the tyrant John in 1215, was only won after four and a half centuries of conflict between sovereign and people. The word "people" is used here and elsewhere in these chapters as a generic term referring to those members of the body politic who from time to time were capable of taking part in public affairs. In the time of the Norman Kings $54]$
probably not over a fifth of the inhabitants could be so. classified. The growth of general intelligence which has at last, in a sense, fitted the greater part of the people to exercise the rights and duties of citizenship only came into full flower within the past century.

The effort on the part of the sovereign was to secure an income from other sources than from taxation. The people, on the other hand, found that the only way to insure just treatment by the sovereign was to keep him poor, so that he needs must come to them for an "aid" or a "grant." On such occasions they could insist on a redress of grievances or on a surrender of some part of the royal prerogative before the grant was voted. Thus, little by little, one by one, were secured the liberties which old England and ourselves now enjoy. "No taxation without representation" was not a new formula in 1776. The principle had its beginnings centuries before.

We are to study English public finance since the Revolution of 1688 , but in order that we may do so intelligently, we must first consider the developments of the six centuries which elapsed between the advent of William the Conqueror in 1066 and of that other William who came over from Holland in 1688, at the request of a little band of patriots, to help them rear a constitutional government on the foundation which had been laid by their forefathers and upon which the Stuart Kings had tried in vain to build for autocracy.

This later William had expected to receive the usual life grant from the customs which the kings and queens from time immemorial had enjoyed. The Commons declined to make this grant for a longer period than four years. Thenceforward the power of the King steadily declined and the rights of the people steadily increased until we have in the

England of to-day one of the greatest democracies of the world and of any time; a democracy the government of which is more sensitive, perhaps, to the will of the people than is the case even in our own United States.

Let us now turn our attention to the eleventh century and trace the course of public finance to our own day.

We will be able to deal only with the facts of greatest importance.

## Chapter Vill

## Revenues of the Anglo-Saxon Kings

WHEN William the Conqueror arrived from Normandy, what revenue system did he find and what new ideas did he bring with him from his Norman home?

## The King's Demesne

First of all he found that Alfred, and Edward (called "the Confessor") and his son Harold had enjoyed great landed possessions, and flocks and herds. They had possessed rude castes, jewels and richly embroidered robes of state. They had had a royal hoard kept in the King's castle where there were leather baga filled with the roughly minted silver coins of the time.

The germ of the feudal aystem was there also.

## Trinoda Necessitas

The revenues of the Anglo-Saxon kings were derived from their estates, from fines imposed as penalties for the infraction of the rude laws of the times, and from certain taxes to which every land owner was subject. These taxes, known as the trinoda necessiuas, were at first exacted in kind; every freeman when legally called upon was obliged to appear in person for the purpose of repelling the enemy, herr-geld; or when a city, town or castle or a fortress for the public defense was to be built or repaired, burg-bote; or when bridges necessary for the internal commerce of the country were to be built or repaired, brig-bote. In time it came about as a matter of convenience that for payments in personal services or materials a money equivalent was given.

## Dane-geld

These taxes, intended to meet the ordinary contingencies of day-to-day life, did not suffice to repel the attacks of the Danes. These were not infrequent, and were marked with every species of devastation and horror. Therefore, in the latter part of the tenth century it became the custom to bribe the Danes to stay in their own country. As usually happens in cases of bribery and blackmail, the Danes continually demanded renewed and larger payments. The tax which was laid to obtain this money was known as Dane-geld, or Danemoney, and was raised by a levy upon lands. Ultimately this tax became a regular source of income to the Crown. Laid ostensibly for the defense of the country against the Danes, actually it was used for any purpose to which it might be applied by the King. This tax was very odious to the people, but persisted, except during the reign of Edward and Harold, until long after the Norman Conquest. It is the first instance in British history of a tax laid upon lands. It was imposed at so much a hide, a measure which may be roughly taken to have been about one hundred acres.

Other Anglo-Saxon taxes which endured to later times were the hearth tax, a payment to the King for every hearth in all homes, except those of the very poor, and ship-geld, money raised to build and equip a ship or ships for use in repelling invasion. This latter tax was levied, as a rule, only on the coast towns.

## Purveyance

Under a system known as purveyance, it was customary for the reeves, or sheriffs, to make a levy of goods to be used for the maintenance of the royal household. The King was
entitled also to a share of the produce of the folk land-that is, land held in common by the residents of. different neighborhoods.

## Customs

Probably the Anglo-Saxon kings had some revenue from home and foreign trade. We find smiths and carpenters, fishermen and millers, weavers and architects mentioned in old chronicles as belonging to various convents. We also find the merchant asserting the dignity of his calling. "I am useful," he says, "to the King and his nobles, to rich men and to common folk. I enter my ship with my merchandise, and sail across the seas and sell my wares, and buy dear things which are not produced in this land, and bring them with great danger for your good." And then he tells what he brings-"skin, wine, oil; costly gems and gold, various garments, pigments, brass, copper, tin, glass," and so on. This whole question of foreign commerce from these early days until now is of intense interest, and is as much bound up in the story of England's business life as the question of public finance is inseparable from a study of the development of England's liberties.

## Licenses

In Anglo-Saxon and Anglo-Norman times, fairs took the place of shops. In the beginning they had a distinctively religious character which they gradually lost. The people were in the habit of coming together to perform their devotions in the churches at night-time with candles burning. They would gather in the church porches and yards for social intercourse, and finally "fell to lechery and songs, dancing, harping, piping and also to gluttony and sin." Thus was laid
the foundation for those periodical fairs which are held even to the present day. It was natural that where the people were gathered together the merchants should bring their wares for sale. This was also a great convenience to the people when the means of traveling were bad, and opportunities to supply their needs were scant. At these fairs they could barter their sheepskins and agricultural produce, or any of their rough local manufactures, for the wares of the merchants. In time these fairs became markets which were held at regular places at regular intervals, probably very much as is still the custom in Russia where the annual fairs play such an important part in the commercial life of the people. It. need scarcely be pointed out that the thrifty Anglo-Saxon and Anglo-Norman kings turned this custom to good account as a means of revenue, charging fines, or, as we would say, license fees, for the right to hold the fairs.

## The Exchequer

There was in use, too, in all probability, a system for collecting and caring for the King's revenues very similar to the system which William had in use in Normandy-a system which persisted in part at least until the times of Queen Victoria, and in the names of certain officials has lasted even to this year of grace 1920. This system and the modern treasury department are described in a subsequent chapter on the Exchequer.

## Chapter IX

## The King's Prerogative

WILLIAM rook possession of all the royal properties and sources of revenue and grafted on to these the Norman feudal system of land tenure.

As King, William claimed the royal demesne, the royal forests and the perquisites of royalty, described above, enjoyed by his Anglo-Saxon predecessors.

## The Royal Demesne

This was of vast extent. There were three divisions:the forests which formed the King'a hunting grounds and were secured against intruders by a savage code of special regulations known as the forest laws, the land held by the King's rural tenants and thirdly the holdings of urban tenants. This latter division included most of the cities, boroughs and towns of the Kingdom which originally had been founded on the folklands. The rents of these towns were collected by the theriffs.

All of the tenants of the royal demeane were liable to assist the King on any occasion of special expense-even to the tenth part of their goods.

## Fcudal Aids

As feudal lord he claimed the so-called feudal aids, namely, the right to levy a tax for his ransom should he be taken prisoner by an enemy; the right to receive a generous contribution from his people when his son was invested with the privileges of knighthood; and of a corresponding coneribution upon the marriage of his eldest
daughter, to provide her with a dowry. Under the feudal system the King, in addition to these special aids which were never surrendered until six centuries later, was entitled in time of war to the personal services of his Knights, who must attend him with a complement of men, equipped for service.

## Purveyance

Under the name of purveyance, the King was entitled to impress horses and vehicles to transport him and his entourage from one part of the country to another. He was entitled to appropriate any food or other articles which he required, paying for them such prices as he saw fit; this was called "preëmption," but in process of time was merged with the Anglo-Saxon idea of purveyance already noticed; the two rights going under the name of purveyance. This constituted a most obnoxious form of imposition which persisted for several centuries.

## Fines-Bona Vacantia

Another source of income was from fines for trespassing upon the King's domains, especially for taking wild animals or even wood from his forests or fish from the streams therein. As the fountainhead of justice, the King was entitled to a share of the fines levied upon criminals of high or low degree. All treasure trove, i.e., money; plate, or, bullion found hidden in the earth; waifs, or goods stolen and waived; stray cattle, wrecks or large fish belonged to the King. These were known as Bona Vacantia. The custody of the property of idiots and any profit accruing after providing for their support; also estates to which no claim could be made by rightful heirs fell under this head.

If all of these sources of income were not sufficient, the King might debase the coinage; he might ask his people for presents-sometimes called contributions and subsequently, by the Tudors, benevolences; or he might simply extort or exact gifts or call for loans which he might or might not pay as the spirit moved him. It may be noted here that based on the so-called voluntary offerings to the King an additional ten per cent was levied for the personal use of his Queenthis contribution was known as Queen's gold.

Having seen what were the sources of the King's income at the time of the Conquest and during the reign of the Norman Kings we mav now consider the subsequent developments.

## Chapter X

Crown Revenues Subsequent to the Norman
Period
(II54-1688)

THE constant effort of the people from very early times, perhaps not at first a very definite intention, was to keep the King poor so that he would need to come to them for supplies. Then, by withholding money grants until their grievances were remedied, little by little they developed the constitutional rights now enjoyed.

The principal sources of revenue of the early English kings and queens, other than the revenues derived from their demesnes and prerogative as already described, were the customs duties, internal taxation, borrowing and extortion in various forms.

The first two may be described as legitimate, or constitutional, sources; the last as a method of evading constitutional processes. Borrowing was strictly the personal act and privilege of the sovereign. It was used as a legitimate means of bridging over gaps in the receipt of revenue. Frequently, also, it was used as a means of avoiding the necessity of asking Parliament for a grant. It was often only a disguised form of extortion.

It may be of interest briefly to consider each of the sources of income.

## The Customs

The King's right to exact tolls on goods going out of or entering the kingdom is supposed to have grown out of the $64]$
idea of purveyance. Certain it is that the right to prisagethat is, to take goods or chattels in kind-and to the collection of tolls or duties on wool and other exported goods was exercised from an early date and was prized by all the kings reigning down to the Revolution as one of the choicest of their hereditary privileges. It came to be understood that without parliamentary grant the King could collect what are called in Magna Charta "the ancient and equitable duties." These consisted of an export duty which was collected on wool, wool-fells (that is, skins with the wool attached) and upon leather. The King, as one of his prerogatives, was entitled to two casks of wine out of every cargo. This right was afterward reduced to a definite tariff on wine and was known as the "New Customs." In the time of Edward I, toward the end of the thirteenth century, the custom arose of granting the King, for life, duties known as "tunnage" and "pound age." These duties were levied upon every tun of wine and upon every pound of merchandise imported; also at times upon exports. They were levied in addition to the old and new customs duties.

In addition to the hereditary duties and the life grant of runnage and poundage the King received customs subsidies, as they were called. The subsidy was a parliamentary grant in excess of those already described. These grants were made from sime to time as called for by the exigencies of the King's affairs. In times of war they were greater than in times of peace. They were always granted for short periods.

The customs revenues were especially prized by the earlier kings of England even down to the time of the Revolution, because there were so many ways in which they could be utilized to maintain a position independent of parliamentary control. Some of the kings formed the practice
of dealing directly with the merchants in connection with customs matters and thus obtained an informal revenue in addition to that levied by law.

From early times the right to levy customs duties was used both by King and Parliament to promote home manufactures. This use of the tariff to regulate commerce and to develop home industries was continued until well into the reign of Queen Victoria, when the free trade regime began.

## Internal Taxation

The medixval forms of taxation forecast most of the methods now in use. There were poll taxes, a species of house tax called "hearth-money," land taxes, taxes on personal property and taxes upon income. There were also special taxes upon the Jews and upon aliens residing in the country.

The land tax may be traced back to feudal times. In the very early days it was directly assessed by the King upon the landed proprietors. However, because of the abuse of this right, it was provided in Magna Charta that no scutage or aid (the name under which the form of land tax then levied was known) should be imposed unless with the consent of the Common Council of the realm, excepting for ransoming the King's person, making his eldest son a Knight or marrying his eldest daughter; and even then only a reasonable aid was to be demanded. In the course of time the land tax came to be included under the general name of subsidies.

A subsidy was properly neither a tax upon personal or landed property, but upon income. Every description of persons, in proportion to their repyted estates, paid after
the nominal rate of four shillings in the pound for lands and 2s. 6d. for goods, while aliens paid in a double proportion.

One of the earliest forms of taxation dating from the reign of Edward III, say, from 1334, and in use until the time of James I (1603-1625) was a tax on personal property known as "tenths and fifteenths." The tenth was a grant laid upon the movables or personal property of residents of cities and towns within the demesne, and the fifteenth was a grant from the counties outside the demesne. The amount for each district was established in 1334 and thereafter was never changed. Thus each district knew exactly how much it was expected to provide. Parliament in making grants would specify that one or more tenths were to be granted, or if only a small sum were needed half of a quota might be granted.

During the regime of the Long Parliament (1640-1653) a form of eaxation was introduced calling for monthly payments. These taxes were assessed on both personal and landed property. They were found to be so superior to the former mode of subsidies that under the name of land tax they became a regular method of taxation in use for many years thereafter and superseded the old assessments of subsidies and tenths and fifteenths.

Indirect taxation, except as exemplified in the customs, was unknown in England until the middle of the seventeenth century when, in 1643, the Long Parliament adopted from llolland a system of excise taxes. This method of disguised caxation from that time became increasingly popular with the Exchequer Department because thus it was possible to keep down the taxation upon the rich landed classes and to obtain what amounced to a very heavy tax from the consumers of various articles-chiefly beer and spirits, but later on, of tea cocoa and other articles-without their realizing that they
were paying taxes. As time went on, this form of taxation was used on occasion to regulate the sale of spirits when the Government felt that their use was endangering the moral status of the nation. Again, the finance ministers directly encouraged the consumption of spirits in order that the revenue from the excise might be increased. To-day this form of taxation provides a very important portion of the revenue of the State.

The post office dates from the time of the Long Parliament, but as the charge for its services usually provides very little revenue to the State, the receipts of this department can hardly be considered a form of taxation.

## Taxes of To-Day and Their Origin

It is of interest to run over the heads of taxation as given in to-day's official Finance Accounts and to note how the most important of these taxes had their origin prior to the time of the Revolution. For instance, we have, in order, the Customs dating back to the earliest times; the Excise dating back to the Long Parliament; Stamps-first introduced in 1671 -imposed by a statute entitled "An Act for laying impositions on proceedings at law." The Land Tax persists but now affords a very slight part of the revenue, although for hundreds of years it was of great importance. The House Duty may be said to be the modern form of hearth tax which under the name of "fumage" dates back to Anglo-Saxon times. Property and Income tax-the first levy of a tax of this kind dates back to the reign of Richard I in the latter part of the twelfth century. It will be remembered that upon his return from his memorable crusade to the Holy Land, Richard was captured by the Emperor of Germany and, in order to effect his release, was compelled to pay a very
heary ransom. It was to help raise the money for the payment of this ransom that the first tax in the nature of an income tax was laid. This tax was both an income tax and a perwonal property tax and called for one-quarter of the revenue or goods of every person in the realm. The Excess Profiss Duty is a modern form of the income tax. Land Falue Duties are another form of the land tax. The Post Office we have already seen, dates from the time of the Protectorate. Croon Lands 2 prehistoric source of income, still figure in the statement and actually yield to-day more than the land tax. Thus with the possible exception of Estate Duties only, the present main forms of taxation all had their origin in medizval times, or at least date from a time prior to the period of the Revolution of 1688 . Even in the last case we have an ancient parallel in the fact, as stated on page 62, that estates to which no claim could be made by rightful heirs reverted to the King.

## The Church

A large portion of the revenues of the mediaval kings was drawn from the church, which is stated to have held in the 1 sth century a fourth of the landed property of the Kingdom. Taxation was supplemented by extortion and finally in the reign of Henry VIII by the wholesale confiscation of church properties.

## Extortions

We have now reviewed the regular sources of Crown income. The pre-Revolution sovereigns were perpetually living beyond their income and frequently were at swords' points with Parliament. Therefore they exercised their ingenuity to discover means of meeting their expenses without going to

Parliament. To this end they pushed their prerogative rights to great extremes. By collusion with the judges they punished infractions of the laws with severe fines. As stated above, they made levies on the religious orders and upon the church, and Henry VIII confiscated church properties. They made forced loans from their subjects of high and low degree which they forgot to pay. They created new orders of nobility for initiation into which they made heavy charges. They went around among their subjects almost hat in hand asking for gifts-"benevolences," they were called. They granted licenses for various acts. They engaged in business enterprises and had part interests in privateering expeditions. Then there was the loot and the spoil of the wars in which most of them engaged. One favorite method of supplying national requirements and of filling his private purse was for the King to grant the right to monopolize certain lines of manufacture or of business and finally, if all else failed, the coinage might be debased and the seigniorage realized.

## Coinage

The first debasement of the coinage recorded is in the reign of Edward I when, in the year 1300 , the penny was reduced one-half grain in weight, so that 243 pennies, instead of 240 as before, were struck from a pound of silver. In 1344 and again in 1346 the standard was further lowered, raising the number of pennies in the pound to 270 . In the reign of Edward IV, in 1464 and 1465 , the number of pennies to the pound was raised to 450. Henry VIII debased the coins several times so that at the end of his reign the silver coins contained only one-seventh of the pure metal that went to the same coins of 25 years before.

One of the notable events of Elizabeth's reign was the
restoration of the coinage. This she arranged before she had been two years on the throne. It is said to have been necessary for her to borrow two hundred thousand pounds from the city of Antwerp in order to carry through this reform. Even Elizabeth, with all her inherent love for financial honesty, was prevailed upon to have a base coinage struck for use in Ireland, while in the forty-third year of her reign she was persuaded to have sixty-two instead of sixty shillings minted from the pound of silver. Since the reign of Elizabeth no sovereign has ever attempted to debase the coin of the realm. However, through sweating and clipping, the coinage had become so debased at the time of the RevoIution that, necessarily, one of the first acts of William III was to take steps for its restoration.

## Chapter XI

## Crown Debts

(1216-1688)

HENRY III ( 1216 -1272) is the first king of England whose debts are recorded in history. In the 16th year of his reign they had become so great that Parliament was obliged to grant an "aid"-that is, a tax-to assist him in paying them off. He is said to have pawned the jewels of the crown, his robes of state and other royal ornaments and even the shrine of St. Edward. Matthew Paris, the chronicler of this period, states that he owed so much to so many different people, for the very necessities of life, that "he durst hardly appear in public for the clamor of his creditors." Henry borrowed from the Italian merchants, from the Jews, from his own brother-in fact, when and where he could.

## Interest Payments Forbidden

The sentiment of the time was strongly against the payment of interest, or "usury," as it was called; in fact, such payments were interdict by the church. However, in case of the non-payment of a loan when due, a charge could be made for the inconvenience to which the lender had been subjected by such delay. Such charges sometimes ran as high as ten per cent. a month.

Thereafter scarcely a reign passed without borrowing to a larger or smaller extent. If these debts were not liquidated within the reign they were usually honored by the succeeding monarch. Fortunately for the lenders there was a superstition that until the debts of the deceased were paid his soul $72]$
would remain in purgatory. Therefore it was a filial duty for a zon to provide for his father's obligations.

## Security Given

These loans were sometimes raised upon the security of the customs. Sometimes the customs were "farmed" or sold to foreign money lenders for a lump sum or for an agreed periodical payment. The farmer, as his profit, retained any amount collected above the agreed payment.

Toward the end of the reign of the fifth Henry, we find a new precedene being established in regard to Crown debts. This occurred in 1421, upon the return of the King from a successful campaign against the French. The King had incurred heavy debts for the payment of which Parliament authorized security to be given in the form of letters patent to the lenders that they would be paid out of the first produce of a subsidy, a new tax of the nature of an income tax, which was granted at the same time and which we have already described. The fact that this tax did not prove to be sufficient for the purpose and thie in the end the King was compelled to pledge the royal crown and jewels to make up the deficiency does not alter the significance of this action.

## Repudiation of Debts by Henry VIII

Henry VIII, among other infractions of the laws of God and the rights of his subjects with which he was justly chargeable, wat also guilty of repudiating his debta. The Parliament of 1525 which impeached Wolsey passed an extraordinary atatute wherein "they do, for themselves and all the whole body of the realm which they represent, freely, liberally and absolutely, give and grant unto the King's highness, by authority of this present Parliament, all and
every sum and sums of money which to them and every of them, is, ought or might be due, by reason of any money or of any other thing, to his grace at any time heretofore advanced or paid by way of trust or loan, either upon any letter or letters under the King's privy seal, general or particular, letter missive, promise, bond, or obligation of repayment or by any taxation or other assessing, by virtue of any commission or commissions, or by any other mean or means, whatever it be, heretofore passed for that purpose." This action naturally excited much resentment and worked hardship to many, as it converted loans into taxes because the money, the repayment of which was refused, was thus practically extorted from the lenders, exactly as though originally taken in the form of taxes. On the other hand, there were many who were pleased to see Wolsey's friends, for they were the principal creditors, amerced, and the King's debts annihilated. The friends of the people were glad that a mode of supply so dangerous to public liberty should be discredited. This bad precedent was followed again in 1544, when a similar act was passed releasing the King from all money borrowed since 1542 , and, moreover, requiring those who had received any payments on account of such loans to refund the money to the Treasury.

## Compulsive Loans

In marked contrast to the dishonest action of Henry VIII toward his creditors was that of his daughter Queen Elizabeth, who assumed and paid off a large accumulation of debts from his reign and those of her brother and sister, Edward VI and Mary. Even Elizabeth continued a practise, of which many examples had been given by her predecessors, of compelling loans from unwilling subjects on pain of imprisonment. As
far back as the reign of Richard II the prerogative of exacting loans had been recognized by Parliament. As on loans of this character, no interest was paid they worked great hardships to the lendere, even when a conscientious sovereign, such as Elizabeth, finally paid them. What course a different type of sovereign could take we have already seen.

## Forcign Loans

In the reigns of Edward VI and of Mary it became a usual practise to negotiate loans on the Continent, especially in Antwerp and other Flemish cities. As high as 14 per cent. interest was paid for such loans.

Elizabeth had excellent credit in Hamburgh, Cologne and Antwerp where she was able to borrow at from 10 per cent. to 12 per cent. interest, although she was in some cases obliged to furnish the additional security of the City of London. Finally by frugality and good management she procured the money at home to entirely liquidate her foreign debt.

## Stop of the Exchequer

The Stuarts were also heavy borrowers, while to the discredit of Charles II is the fact that in 1672 he stopped the repayment of loans made by the Goldsmiths to the Exchequer. He thus tied up their resources and ruined many of them and, in turn, their clients whose bankers they were. This debt was finally compromised late in the reign of William III at fifty cents on the dollar. This is the famous "Stop of the Exchequer."

All in all, the history of Crown borrowing is not a very creditable one. It should be borne in mind that in these early days there was no such thing as a national debt. The lenders dealt with the King very much as they would with a
private individual. As, for a large part of this period, the payment of interest was regarded as an irreligious act, many subterfuges were resorted to in order that the lender might be compensated for his risk and the use of his capital. One arrangement was that a charge might be made for delayed payments; therefore it was customary to allow a loan to mature and then to run along for a longer or shorter period thereafter. The money lenders sometimes received a percentage on the taxes collected by acting as farmers of the revenue as already explained. Sometimes the lenders were rewarded with gifts of titles, or lands or jewels.

## Chapter XII

## Constitutional Government Developed by Control of Purse (1066-1688)

ENGLAND'S present democratic form of government has been developed from the autocracy of the Middle ages by a gradual process of evolution.

## The Plantagenets

Magna Charta extorted by the barons from King John in 1215 remedied certain feudal abuses in the matters of purveyance, relief, wardship and marriage and in particular admitted the right of the nation to ordain taxation and defined the way in which its consent was to be given.
Before 1295 when arranging for grants it was customary for the King to deal separately with the clergy and the barons. In this year, in the reign of Edward $\mathrm{I}, \mathrm{a}$ transition which had been gradually taking place since 1282 took fixed form and the Commons were admitted to a share of the taxing power. The three estates acted separately and made grants of varying amounta, but they took action simultaneously at a common place of meeting. The year 1303 is memorable in commercial as well as constitutional history. It was in this year that the Charta Mercatoria was granted. This has been called the Magna Charta of Commerce. By its terms the ports, cities and towns of England were opened for wholesale traffic to foreign merchanta.

The codification of the laws under this King and the revi-
sion of the charters all tended to strengthen the position of the people.

The necessities of Edward III and the weakness of Richard II still more strengthened the position of the people, so that they did not hesitate to depose Richard in favor of a king who it was thought would reign more equitably, but while conditions then were not dissimilar to those subsequently, at the time when Charles II was deposed, the people were not yet ready to take advantage of the progress they had made. The King was still an autocrat and would be for several centuries, but the right of the taxpayer to be heard before he backed up the King's projects with his aid was coming to be fully recognized, although the King constantly endeavored to evade that condition, only to be brought to book again when some critical situation, such as a foreign war, requiring large contributions, should arise. But it took several centuries more of experience before the people were prepared for self-government.

## Lancaster and York

The six reigns of the Lancastrian and Yorkist kings covering the greater part of the fifteenth century ( 1399 to 1485) were years of foreign wars and domestic strife. During the reigns of the Lancastrian Henrys, constitutional forms were well observed. This period of about sixty years was one of poverty on the part of the Crown when large dependence must be placed upon parliamentary grants. On this account Parliament became much bolder than in previous reigns. It did not hesitate to interfere with the management of the King's household, by urging economy in household expenditures and limiting the purposes for which such expenditures might be made.

It was during the reign of Henry IV that the right of the Commons to initiate money legislation was brought to the fore and the precedent in that respect more firmly established.

## The Tudors

The Tudor period ( $\mathbf{1 4}^{85}$-1603) was one of reaction. The people to a great extent lost control of the Crown. For the most part parliamentary forms were observed and the checks to royal authority which had been gradually developed from the time of Norman William were not directly contravened but more than once they were evaded.

The customary grants of revenue by votes of Parliament were made at irregular periods and it is known that the revenue from such sources was relatively unimportant in comparison with that derived from the customs, from the King's prerogative and from compulsive and voluntary loans, and during the reigns of Henry VIII and Edward VI from the debasement of the coinage and the sales of the confiscated church lands. In other words, the sovereigns of this period found ways and means to get along with amall parliamentary grants and therefore could be as autocratic as their fellow monarchs across seas while yet keeping up the appearance of subserviency to old constitutional forms.

## The Stuarts

The period of English history lying between the reign of Elizabeth and the Revolution ( $1603-1688$ ) is distinctive as the one in which the powers of sovereignty are finally transferred from the Crown to Parliament. After the close of the seventeenth century we no longer speak of Crown finance but of national finance. While all other peoples, with the exception only of the Swiss, were giving up all rights of citizen-
ship to autocrats of the most absolute type, England was evolving a system of government which combined "freedom with efficiency, and local rights with national union."

These changes did not take place hastily-in fact, English life in all departments of activity was essentially the same, so far as surface indications went, in the times of the first Scotch kings, as it was during Elizabethan times. Political events of great importance were gradually shaping men's minds for the radical changes of the latter part of the periodfrom 1640 on.

The Stuarts had all the Tudor love of power and belief in the inherent rights of monarchs to rule, without the Tudor ability to manage their subjects.

James I did not know anything, either in the spirit or in in the letter, about the laws and liberties peculiar to England. Constitutional custom and parliamentary privilege meant nothing to him until late in life and then he looked upon them solely as an impediment to a benevolent government. Elizabeth by her economies had put the finances of the nation on a sound basis and had left the Treasury in a flourishing condition. However, James spent money so freely that he was in constant need and thus was continually in opposition to Parliament. Early in his reign he revived the feudal rights of the King to collect revenue independent of parliamentary grants. A vigorous controversy arose over these efforts of the King. A compromise was proposed in the form of a contract to be entered into by the Crown with Parliament, whereby in consideration of a grant for life of $£ 200,000$ a year the King would surrender all sources of revenue due to his prerogative. The consummation of this plan was prevented by religious controversies which led to the dissolution of Parliament in February, 16ir.

From this time until January, 1621, a period of ten years, the King reigned without parliamentary co-operation except for a two months' meeting of the "Addled Parliament"in 1614 . Court intrigue dominated public affairs for this decade.

Finally, the approach of war abroad made it necessary in 1621 to call a Parliament and for a few years the parliamentary side was temporarily in the ascendency.

Charles I succeeded to the throne in 1625 and for eleven years conducted the affairs of the nation without the aid or interference of Parliament. Then the pent-up forces of democracy broke loose, assuring to England and the Englishspeaking world the ascendency of the principles of representative government.

## Commonvecalth and Protectorate

The period from the death of Charles I to the accession of Charles II (1649-1659) is called by some historians the period of the Republic. Nothing could be further from the modern conception of a republican form of government that is, of a government founded upon representation. The government of Cromwell was dependent for its power upon his army and he dare not appeal to the voters except in a partial and negative way. As Trevelyan says: "When the roundheads in the name of the people had seized power they found not only the active champions of democracy but the people itself-whatever definition be given to that term-bitterly hostile to their rule."

Nevertheless the period was one of active training of the people for self-rule. The naval supremacy of Great Britain was then firmly established and the path of Empire blazed and its foundation laid.

Public discussion which under James had been frowned
upon and under Charles actively repressed was free and open after the war broke out between King and Parliament. The period was one which compelled men to think hard and to take definite positions, for which they must be prepared to give their reasons and stake their lives and fortunes.

Under the Commonwealth and the Protectorate the cost of government was the highest which the country had ever known. However, this increased cost was part of the discipline which the country needed to prepare it eventually for self-government. Still this does not change the fact that the Protectorate was thereby brought to its end and the restoration of the monarchy made popular.

The pressure of taxes, the general depression of trade, the poverty and suffering of the working classes and the bad state of credit all combined to make the people ready for a change. So, when the guiding hand of the great Cromwell was removed by death, his government easily disintegrated and once more a king took his place at the head of affairs.

## Charles II

The restoration of the monarchy seemed to be necessary to prevent civil war. It was the only form of government upon which all parties could agree. The country was to endure for almost a generation the rule of the profligate Charles II and the bigoted James II. During this period the forces making for constitutional government were still further developing to come to their fruition in 1688 through a final revolution.

Now that government had resumed its normal course the traditional policy of the nation against the maintenance of a standing army led, as a first step, to the disbandment of the
army. As the pay of the voldiers was much in arrears it was necessary to raise at once for this purpose the sum of around $£_{400,000}$. This was accomplished by the imposition of a graduated poll-tax, said to have been up to that time "the greatest poll-tax, and most particular, that had been known." No one was overlooked, from the nobility to the humblest citizen. The charges ranged from $£_{100}$ for a duke to sixpence for "every person not rated, nor receiving alms, above sixteen years of age." By reading this Act one may cause to pass in review representatives of every class in the social life of the time-dukes, marquises, earls, viscounts, barons, baronets, knights, sergeants-at-law, esquires, parsons, vicars, doctors of the civil or canon law, doctors of physick; mayors, sheriffs, aldermen, town clerks; masters and other officers of the livery companies; dyers, brewers, leather-followers, girdlers, apothecaries, tallow-chandlers and others. Then there were the barber-surgeons, the white-bakers, the brownbakers, butchers, carpenters and other tradesmen. Then a long list of those in mechanical pursuits and the building trades. The courts' officers and clerks and the officers and clerks of the other departments of the Government all had to pay, and finally, to aweep in any who might have been overlooked, "everyone that could spend, in land, lease, moneys or stock, $£ 100$ per annum, 40 shillings, and so on for a greater or less estate." The produce of this tax is not reported but it is recorded that the much dreaded army merged with the rest of the population and was quickly a thing of the past. The King retained about 5,000 men under arms, thus laying the foundation for a moderate standing army such as England has since then maintained. Pending the collection of this tax and of a special assessment on lands and movables, arrangements were made with the city of London for a loan.

Charles was successful in inducing Parliament to settle a permanent revenue upon him of $£_{1,200,000}$ a year. This was something many times before attempted but now for the first time arranged. The King was to surrender all revenues from his prerogative, such as wardships, marriages, purveyance, pre-emption and the like, from which a considerable portion of the Crown income had previously been obtained. On the other hand, Parliament made the new appropriation a special charge upon an excise tax upon liquors, including not only beer, ale, cyder, strong-water, but also vinegar and even coffee, chocolate, sherbet and tea. The income from this source not proving to be sufficient to produce the amount appropriated, it was later found necessary to supplement it by other taxes.

The remainder of this reign was marked by continued clashes between King and Parliament. Large supplies were required for the conduct of wars with the Dutch.

For the expenses of the first war Parliament readily voted the requisite amount. Two notable departures were made from former usage. The old method of raising money by subsidies of tenths and fifteenths was abandoned forever and the mode of monthly assessments introduced during the Civil War adopted instead. The clergy who used to tax themselves in convocation now consented to be taxed by Parliament in the same manner as the laity. In return they obtained the right of voting at elections.

This war with its disgraceful ending, the fire of London and the plague, all combined to make the people restive under the necessarily heavy taxation while their incomes were seriously curtailed.

So, when Charles in 1672 secretly began another war against Holland, without the consent of Parliament, he ob-
tained the cash resources required by confiscating the balances of the merchants loaned to the Exchequer. This was the "Stop of the Exchequer" already considered. This is the last instance in English history of such a proceeding, just as the Stuarts were the last of the autocratic sovereigns. Parliament finally forced peace in 1674 by refusing to give further supplies. Just as it seemed as if Parliament had the King in a position where he must abandon his autocratic methods he succeeded in obtaining a loan from Louis of France and Parliament did not meet again during the last four years of his reign, which ended in February, 1685.

## James II

Upon his accession James II was apparently one of the most autocratic of rulers. The people were subservient and Parliament voted him large supplies for life. He had a large army, although it was not well disciplined and was not in sympathy with his religious views. However, while the nation was much divided on the subject of religion and one Protestant sect was cruelly treating all the others, they were a unit in opposing his desire for Catholic supremacy. Thus the nation was prepared to take the stand against James which was involved in asking William the Hollander to head an armed expedition to England. And so with the flight of James to France ended the Stuart dynasty and autocracy.

## Chapter XIII

## England After the Revolution of 1688

(1688-1920)

THE Revolution of 1688 drew a sharp line between old England and an England in which new conditions were to prevail. In politics, in its economic status, in its outlook upon the rest of the world and its relations therewith the nation was to experience changes of the greatest importance to the welfare of its people.

The history of this new England naturally divides into three epochal periods. First we have a century and a third in which the keynote is war-war in a military sense; war in an economic sense. England for the English and England against the world, including her own colonies and her sister island of Ireland.

The dominating note of the next century is peace, accompanied by great political, industrial, economic and social changes.

Then we have the brief climateric period of the recent war-a period when England nobly and voluntarily supported by all of her Dominions and Dependencies; joined hands with France, Italy, and America, to save from destruction their common civilization.

## Origin of the National Debt

The great financial engines which provided the power to make this victory possible had their genesis during the closing years of the seventeenth century. The ideas which gave them birth were probably of Dutch origin, brought with him 86]
from Holland by William III. These were public borrowing and banking. Prior to 1688 there had been no such thing in England as a national debt. The sovereigns had frequently borrowed money but these loans were transactions with special groups of moneyed men and in no sense borrowings of a national character, raised on a systematic basis. As an alien, King William hesitated to burden the people too heavily with taxation and therefore to meet the expense of his ware resorted to borrowing on a large scale.

## The Bank of England

In 1694 the Bank of England was incorporated.
This was the first incorporated banking institution in England. Its charter, which was granted July 24, 1694, provided that in exchange for a loan to the Exchequer of $£ \mathbf{1}, 200,-$ 000 the incorporatora might deal in bullion and bills of exchange, issue notes and make advances on merchandise. It was a private undertaking and so remains to the present day. On the other hand, it performs important public functions, auch 28 the management of the public debt and finances. Ite history, privileges and responsibilities are discussed in detail in subsequent pages.

## The Exchequer, or Treasury, Bill

The first Exchequer bills were issued in 1696. As originally issued they were a form of Government currency.
Their subsequent use has been to bridge over the period between expenditure and the receipt of income from taxation or from long time loans. They have served as the shuttle which wove into the fabric of Government resources the floating capital of the realm. Since 1877 Treasury Bills which perform the same functions have largely taken their
place. The principal difference between these two classes of bills is that the Exchequer bills are paid with accrued interest while Treasury bills are issued at a discount and paid off at par.

## The Income Tax

Another mighty engine of public finance, the income tax in its modern form, was not provided until late in the next century. This tax was first levied in 1799 at the instance of William Pitt, the younger, as an aid in the financing of the first part of the Great French War. It was levied at the rate of ro per cent. on all incomes of two hundred pounds and above. In the first full year of its operation it provided about four and a half million. Compare this, even after making liberal allowance for the greater purchasing power of the $£$ sterling in Pitt's time, with the return of the last fiscal year (19191920) of nearly three hundred and sixty million, or, with excess profits tax added, some six hundred and fifty million. Its prototype, first levied in the reign of Richard $I$, may have yielded forty thousand pounds-exact figures are not available.

## Joint-Stock Banking

Then, in this survey, we must not overlook the importance of the introduction of joint-stock banking in England in 1826, and the extension of the privileges of such banks to the city of London in 1833 . The marshalling of the credit resources of the world through the agency of these banks and of the great acceptance houses made England the financial clearing house for the world's trade. Thus there were concentrated in London great reservoirs of credit which made it possible for England to carry so heavy a part of the financial burden
of the recent war. The combined financial resources of England and America mobilized through their private corporate banks and their respective semi-state banks, the Bank of England and the Federal Reserve System, provided the credit resources without the use of which the war could not have been fought to its successful climax.

## Public Expenditure

We may now turn to a consideration of the uses to which moneys were put which were made available by this financial machinery of taxation, borrowing and banking. We find in the requirements of war the greatest cause of the creation and growth of public debe. War, the preparation for war, the aftermath of war in the form of pensions and the interest upon the public debt, accounts for over 85 per cent. of the total expenditure of the nation from the Revolution until the present time. In this connection the tables of expenditure and of income from 1688-1920 printed with Chapter XXV will be found worthy of special study.

## The Tariff

Finally, we may consider the use of the taxing power for other purposes than to produce income. Until 1845 England possessed a highly protective tariff, designed to promote the interests of the land owners and the manufacturers. Up to that time the customs tariffs were devised both with a view to giving this protection and to obtaining revenue. This was also true of some internal taxtion. In 1846, largely as 2 sequence to the Irish famine of 1845 , the corn laws were repealed. Thereafter the other protective duties were gradually removed so that, since 1866, England has enjoyed absolute free trade.

England in IgI4
At the time of the outbreak of the recent war England was the richest of the nations, so far as developed resources were concerned. Her commerce was worldwide, her manufactures went everywhere, carried for the most part by her own ships. These also carried a large percentage of the goods of other nations, especially foodstuffs for home consumption and the raw materials of manufacture for which England is dependent upon the rest of the world. England in 1914 was the world's banker and her capital was invested in the promotion of industry and transportation not only at home and in her own colonial possessions, but in many other countries, especially in the Americas.

## The Future?

The recent war has brought about important changes in all of these relations. It is too soon as yet to determine to what these changes will lead. Much depends upon the English workingman and workingwoman. By the progress of events he and she have now largely devolved upon them the decision as to what shall be the future history of the nation. For good or ill over the centuries, slowly, almost imperceptibly at first, but finally with great rapidity within the last fifty years, this power has come to them.

## Chapter XIV

## War and Debt

(1688-1817)

THE period of English history extending from the accession of William III to the close of the Napoleonic wars was one marked by a succession of wars and a steady growth of debt.

In 1688 the only debt of the nation consisted of some $\boldsymbol{f}_{3} 8_{4}, 000$ of temporary obligations for arrears due to the army and for other demands arising from the Revolution. There was also in litigation the claim of the Goldsmiths for reimbursement of the amounts seized from them by Charles II at the time of the "Stop of the Exchequer" in 1672 . This claim was later adjudicated at $\{664,263$. So the entire debt as of 1688 was a little over one million pounds.

In the century and a third lying between this date and 1817, when the expenses of the Great French War were finally determined, the bulk of the public debe of England as it stood prior to the recent world war was created. The wars of William III were the cause of $£_{18}$ million of debt and the wars of Anne of $£_{33}$ million more. The Spanish Right of Search War and the War of the Austrian Succession piled on another $\mathcal{E}_{3} \mathbf{r}$ million. The Seven Years War added $\mathbf{\Sigma}_{57}$ million, the American War £116 million, and the Great French Wars $\mathbf{£} 12$ million. The total debt at the end of the period, allowing for some reductions during the intervals of peace lying between the different wars, was $£ 850$ million.

The table on page 93 summarizes these data. It also affords comparisons not only of one period with another,
but also with the national wealth. It is interesting to note how the growth in population and in wealth kept pace to a measureable extent with the growth of the debt. This was especially the case during the last fifty years of the period. A table giving similar comparisons of the debt charge for the same periods with the national income may be found on page 134 .

## Public Finance in the Reign of William III

The reign of William III was marked by active warfare at home and abroad. At home there was the cruel war for the reduction of Ireland. Abroad there was constant warfare with France which had espoused the cause of the deposed King, James II, and also was at war with England's ally, Holland.

The expenditures during the reign of James, which had been called "crushing," had averaged $£ 2,168,000$ a year. They mounted to an average of nearly $£_{5}$ million in William's reign. This state of affairs constituted a serious menace to the stability of the new government, not altogether removed by the final victory. To cope with such a difficulty William had the advantage of the experience of the Dutch in financial matters. In the Bank of Amsterdam, established in 1609, the Dutch possessed one of the three important banks of the time. England was rich and had come to understand and to engage actively in company promotion and in stock speculation. Domestic business was active, much capital having been invested during the war in the manufacture of goods of a class formerly imported from France. There had also been an active development of mining ventures, water supply companies, munitions factories and other undertakings.

## THE NATIONAL DEBT

At the Close of Historical Periods 1658-1817
Population, Debe and National Wealth in Millions

| Period | Ended | Population | Debt | Change from Previous $\$$ Period | National Wealth | $\begin{gathered} \text { Debt } \\ \text { per } \\ \text { Capita } \end{gathered}$ | $\begin{aligned} & \text { Wealth } \\ & \text { per } \\ & \text { Capita } \end{aligned}$ | Debt Per Cent. Wealth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revolution | Nov. 5, 1688 | -3,2 | $\underline{1.0}$ | $\mathcal{E}$ | ${ }_{3} 1$ | $\begin{array}{ll}4 & 4 \\ 0 & 4\end{array}$ | ${ }_{6}^{2}$ 6 10 | . 31 |
| Wars of William III. | Sept. 29, 1697 | 5,2 | 18,4 | 17,4 | 320 | 310 | 6110 | 5.75 |
| Paoce : | 29,1701 | 5,1 | 15,3 | 3,2 | 320 | 30 | 626 | 4.78 |
| Wars of Anne. | - 39,1714 | 5,2 | 48,7 | 33,4 | 370 | 97 | 713 | 13.17 |
| Peoce - ${ }^{\text {a }}$ - | - 29, 1739 | 5.8 | 48,4 | 3 | 480 | 86 | 826 | 10.08 |
| Spanish-Austrian Wars | - 29,1749 | 6,0 | 79,9 | 31,5 | 500 | 135 | 8216 | 15.99 |
| Proce -1. | - 29,1755 | 6,2 | 75.4 | 4.5 | 500 | 12 l | 7917 | 15.09 |
| Seven Years War | - 29,1766 | 6,9 | 133,1 | 57.7 | 500 | 194 | 723 | 26.62 |
| Peace - in | - 29, 1775 | 7.5 | 127,9 | 5.2 | 750 | 171 | 100 | 17.05 |
| American War | Oct. 10, 1785 | 8,2 | 244,2 | 116,3 | 1,000 | 2915 | 12119 | 24.42 |
| Paces ${ }^{\text {Gren }}$ - | - 10, 1792 | 8,7 | 238,0 | 6,2 | 1,250 | 279 | 1443 | 19.04 |
| Great French War 1 at Period. | Jan. 5, 1802 | \$11,0 | 504,2 | 266,2 | 1,750 | 4517 | 159 158 16 | $28.81$ |
| and Period. | - 5,1817 | 117.0 | 850,0 | 345,8 | 2,700 | 50 | 15816 | 31.48 |

England only. †England and Scotland. 8United Kingdom.
Iftems in Roman indicate increases; in italica, decreasea.

As the war progressed, French commerce was driven off the seas. England was rapidly becoming the greatest commercial country in Europe.

## The Bank of England Foundea

The requirements of the State and of business both called for better banking facilities than were offered by the Goldsmiths. The time was ripe for the introduction of corporate banking. Therefore, when a plan was brought forward for organizing a bank which would make an immediate large advance of capital to the State and which would stand ready to finance the growing requirements of the Government, and also of the commercial classes, it found a ready response, and in 1694 the Bank of England was organized.

## The National Debt Inaugurated

Another idea which William brought with him from Holland was that of national borrowing. The new Government hesitated to place upon the people too heavy a burden of taxation. It was also thought to be a good policy to have the moneyed classes tied to the Government by direct investment in the public funds.

It is an interesting fact that the methods of public borrowing introduced during the reign of William III comprised practically every method since adopted. This indicates at once the resourcefulness of William's finance ministers and the conservatism of the English people. Then, as now, the debt assumed two principal forms-funded and unfunded. According to English Finance Accounts, the funded debt consists only of the perpetual debt, such as the debts due to the Bank of England and the Bank of Ireland and the Consols. The unfunded debt is debt of a temporary nature and debt
repayable at the end of fixed terms. As some of the obligations under this latter head are not repayable for many years the division based on established usage has become somewhat illogical.

We will now consider the early forms of unfunded and funded debt.

## Chapter XV

## Early Forms of the Unfunded Debt (1688-1707)

THE unfunded debt of this period consisted of tallies, navy bills and Exchequer bills. In temporary advances by the Bank-as for convenience we will hereafter designate the Bank of England-we have the precursor of the "ways and means advances" of present-day treasury statements.

## Tallies

Prior to the Revolution the form which the obligations of the Crown usually took was that of loans upon "tallies"a form of wooden stick given as a receipt for money payments. The tally will be found described in the chapter on the Exchequer.

The Exchequer would at times find it inconvenient to meet its payments in cash. It would then give to the creditor tallies or receipts issued in anticipation of revenue. These were known as "tallies of assignment," because a definite source of revenue was set aside for their payment. They were always accompanied by an Exchequer order entitling the holder to the payment of the amount at a set date in the future.

These Exchequer orders were issued in negotiable form, being transferable by endorsement. They sometimes bore interest.

Again, tallies with assignable orders of repayment were given in acknowledgment of money loans. These tallies were called "tallies of loan." The Exchequer order of repayment 96]
was the really valuable document. It was written on parchment and signed by the high Exchequer and Treasury officials.

These orders and the tallies accompanying them came in .time to be known indifferently as "tallies," and the operation was spoken of as borrowing on tallies. Following is a copy of such a document of the time of Charles II.

## EXCHEQUER ORDER <br> Reign of Charles II

Order is taken by ua, this. . . . . . . day of. ............. by virtue of an Act intituled, "An Act for granting a Supply to His Majenty of Two hundred and aix thousand, foure hundred sixty-two pounde, seaventeene ohillinge and three pence, for peying of and diabanding the Forces raised since the Nine and twentyeth of September, One thousand six hundred reaventy and seaven," that you deliver and pay of such of Hia Majestye's treabure as remaine in your charge of the summe of Two hundred six thoumand fower hundred aixty-two pounds, ceaventeene chillingt, and three pence, arising by virtue of the aid Act unto. $\qquad$ . . . . . or bis acaignes, the aumme of.
in repayment of soe much money lent by him unto his Majeatie upon the credit of the said oumme of Two hundred six thoueand fower hundred eixtio-two pounde, seaventeene shillings, and three pence, and paid into the receipt of his Majestie's Exchequer, the auid........ day of.............. as by a tally leavied at the reccipt of the Exchequer, bearing date the aame day, appeara, together with the intereat thereof, at the rate of eight pounds per centum per annum, at the end of every three monthe, until the repayment of the principall; and these, together with hie or ber acquittance, or the acquittance of his or her asaignee or aseigneea, whall be your diacharge herein.

The first loans of William III were raised in the usual way by tallies of loan charged on and in anticipation of various duties. The amounta required were so large that they accumulated more rapidly than the revenues allocated to
them could be collected. Then the Treasury frequently was not in funds with which to meet a given series of tallies because the collections were smaller than the charges. Thus the tallies were discredited and fell to a heavy discount. At the close of the war in 1696 the total deficiency in the funds upon which the tallies outstanding were charged was $£ 5,160,000$. To remedy this defect in the system Parliament swept all of the receipts into one fund, making all outstanding tallies a first general mortgage thereon.

The debt upon tallies of loan was a very dangerous form of unfunded debt. As these loans were usually made only for short periods, the Treasury was under the necessity of making frequent renewals. These renewals were apt to come at inconvenient times.

## Navy and Army Supply Bills

The records show, especially in the case of tallies of anticipation, that the Army and Navy paymasters frequently had to submit to a heavy discount. As high a loss as 25 per cent. is known to have been suffered during the financial distress of 1687. In the following year the Treasury was authorized by Parliament to issue these tallies at 10 per cent. discount to those who would receive them in payment for navy services. In fact it was especially in connection with navy services that such depreciation chiefly occurred.

The navy and army supply bills, as these obligations came to be known later on, were put on a sound basis in 1784 during the Treasury administration of the younger Pitt.

## The Exchequer Bill

The introduction of the Exchequer bill in 1696 was a first step toward remedying this abuse, although it was not until

1751 that they entirely supplanted the tallies. They were issued in the first instance to supply a temporary need for a circulating medium while the coinage was in process of revision. Bank of England notes were not issued at that time in smaller denominations than twenty pounds. The Exchequer bills then issued amounted to only $£_{159,169 \text {, but }}$ in the next year $£ 1,500,000$ were issued and in the following year $\mathcal{L}_{1,200,000}$ more. They were issued in even denominations of five and ten pounds and to such public creditors as chose to receive them. There was no compulsion. They were negotiable, passing.by endorsement. They bore interest. They were receivable by the Government in payment for all taxes, except the land tax, and when received could be reissued. Interest lapsed during the time they were in the Treasury. When the bills were covered with endorsemente they were held in the Treasury and other bills issued in their stead.

In 1707 an issue of Exchequer bills was authorized receivable for taxes, or payable at the Exchequer for any obligation due the Government, and exchangeable for ready money on demand at the Bank of England. An allowance of $4 / 2 / 2$ per cent. per annum was made to the Bank for circulating the bills. These bills bore no interest when issued from the Exchequer, the amount of interest to be paid thereon being left to the discretion of the Bank. The Bank was then in 2 position to guide the Exchequer 28 to the amount of bills which could be safely placed in circulation. The amount outstanding from time to time varied with the exigencies of the Exchequer. The use of the bills as an active circulating medium was regulated by raising or lowering the denoninations in which they were issued.

The Exchequer bills first issued were worded as follows:

- EXCHEQUER BILL Reign of William III
No. 188
Exchequer, 26 April, 1697.
By virtue of an Act of Parliament passed in the viii year of his Maties Reign, This Bill entitles the bearer to Five Pounds, to pass in all payments to Receivrs or Collectors of any Ayds Taxes or Supplys for the service of the War for the year 1697. (except ye III Shilling Ayd), to be recd and satisfied by $y^{\mathbf{e}}$ said Receivrs or Collectrs under ye Penalties in y $y^{\mathbf{e}}$ Act contained.
R. Howard

A farthing a day
interest.
When the issues of Exchequer bills became excessive they were funded into other forms of debt. Thus they afforded a flexible credit instrument which could be increased or decreased as required by the necessities of the Government.

## Chapter XVI

## Early Forms of the Funded Debt (1688-1727)

THE early forms of funded debt were annuities and the perpetual loans from the Bank and the East India Company and later from the South Sea Company given in exchange for their charter privileges.

## Annuities

The annuity loans were made on the same theory as that upon which annuities are sold today by insurance companies.

The seller of an annuity agrees, in consideration of the receipt of a given sum of money, to make the purchaser annually or otherwise, during his lifetime, or for a specified period, a definite payment. This payment is larger than the interest would be upon the principal sum because upon the death of the purchaser, or upon the expiration of the annuity period the sum which he originally paid, or what may remain of it becomes the aboolute property of the seller. That is, in the case of a pure life annuity, the aeller and the purchaser speculate upon the probable life of the purchaser, the latter to increase his income, the former with a view to profit. Presentday tables based upon a study by insurance actuaries of the expectancy of life are remarkably accurate in indicating the average expectancy of life at a given age. The whole principle of insurance is based on this theory of averages.

The tontine policy was invented by an Italian of the name of Tonti. He devised a plan by which a group of individuals would agree with the seller of an annuity and with each other
that, as members of the group died, the survivors should have divided among them the amounts to which the decedents would have been entitled until eventually the entire annuity, or an agreed proportion thereof, would go to the final survivor.

The loan of 1692 for $£ 1,000,000$ was offered on this basis, the benefit of survivorship to last until the group was reduced to seven. The idea was new in England and not understood, so the loan was a failure, only $£$ Io8,000 being raised. At subsequent periods several tontine annuity loans were placed.

In 1695 long annuities having 90 years' certain duration were introduced.

The annuity principle for funded loans was the one chiefly used during the 18 th century. It was often used in combination with other schemes. One of these which came to be increasingly in vogue until the close of the American War in 1783 was the lottery loan which will be found described in Chapter XVII.

## The "Fund of Credit" Idea

There was a theory prevalent in the latter part of the seventeenth century and the early part of the eighteenth century known to economists as the "fund of credit" idea. It was in pursuance of this idea that the Bank of England was organized. The entire original capital of the bank as well as part of the deposits were loaned to the nation. This left the Bank as a basis for conducting its business a "fund of credit" founded upon its loan to the Government. Similar was the policy of Parliament in forcing the East India Company to pass on to the Government in exchange for its obligations the proceeds of its sales of stock.

A bank known as the Million Bank was organized in 1695 on the same basis and for a while conducted a moderately successful business. Pushed to its logical conclusion, such an idea could be developed indefinitely. Its prevalence was not confined to England. The idea was at the basis of the organization of the South Sea Company which was chartered in 1711 and of John Law's Mississippi Company which had such a meteoric career a few years later in France.

## The East India Company

The original East India Company was chartered by Queen Elizabeth in the year 1600. To it was given the exclusive privilege of trade for fifteen years. This period was subsequently extended from time to time, to Asia, Africa, and to America and intervening islands from the Cape of Good Hope to the Straits of Magellen.

The company opened up trade with India and became a rich and powerful corporation. The success of the company led to efforts at competition and finally to the organization in 1698 , under parliamentary act, of a dangerous rival. The consideration for the charter of the new company was that it should make a loan to the State of $\mathbf{£ 2 , 0 0 0 , 0 0 0 \text { . When }}$ the stock was offered, the old company subscribed $£_{315,000}$ and became the dominant factor in the new body. Finally, in 1702 in the reign of Queen Anne, the companies were merged and given exclusive privileges in consideration of a further loan of $£ 1,200,000$.

The story of the East India Company is one of the romances of commerce. It was through its efforts that the great Empire of India was won for Great Britain. Its famous "East Indiamen" held unquestioned pre-eminence among the merchant vessels of the world down to the middle
of the nineteenth century. Some of the most stirring chapters in England's commercial history are written around the voyages of these ships and the stories of Clive and Hastings will ever be memorable in England's military history.

India has been the great imperial training school for a long line of illustrious British soldiers and administrators. The government was taken over by the Crown in 1858, after the mutiny.

## The South Sea Company

The most spectacular operation based upon the fund of credit idea was that with the South Sea Company. This company was at its inception to all intents a government undertaking, although incorporated (in September, 171I) as a private company. It received a charter giving it exclusive trading rights to the east coast of South America with certain limited exceptions and a monopoly of trading in the $\mathrm{Pa}-$ cific Ocean including the entire American Pacific Coast. In consideration of these trading rights, which were expected to have great value, the company was to offer to exchange its stock for the outstanding unfunded government debt and in addition was to pay the Government $£ 500,000$. The Government was to pay the company interest at the rate of 6 per cent. per annum upon all stock which it should thus acquire and in addition $£ 8,000$ a year for management. This offer was accepted, up to the close of 1711, by the holders of upwards of nine million of government obligations. Further exchanges and adjustments, in 1714, made the capital and the debt balance at an even ten million pounds. A further small operation took place in 1719 when the sum of $£ 1,746,844$ was converted. At this time those in control of the company and their associates in the Government
determined upon an operation of no less importance than that of the conversion of the entire balance of the debt into the company's stock. If this scheme could have been carried out the company would have had a capital of around fifty million pounds and would have practically monopolized the banking and trading business of the kingdom. However, the Bank and the East India Company would not come into the arrangement. It was then decided to go ahead without them. By wholesale bribery of the members of Parliament and of government officials, and by collusion with no less a perton than the Chancellor of the Exchequer, the necessary legislation was obtained and the plan successfully launched. This was not accomplished without active competition from the Bank. The competitive bidding of the Bank led the company finally to offer the Government very attractive terms. Provided all of the holders of government obligations, except the Bank and the East India Company, converted their holdings the company was to pay the Government $\{7,567,500$ and was to surrender its trading rights, but with a tacit understanding with Aislabie, the Chancellor of the Exchequer, that they would be restored later on. The Government in turn was to pay interest at five per cent. per annum upon its obligations acquired by the company. It was agreed that after 1727 the interest rate should be reduced to four per cent. The advantage to the nation lay in this saving of one per cent. in interest and in the receipt of the cash payment of aeven and a half million. Manifestly, even if trading rights were restored, which was part of the program, there was no legitimate basis for such a payment by the company.

## The Outcome of South Sea Scheme

The profit to the promoters was to come from stock market operations on a huge scale and they little cared what happened afterward to their new stockholders, the present holders of government debt. By spreading tales of the great profits to be derived from their trading rights-for they took good care not to let it be known that these had been surren-dered-and by the rankest kind of stock market manipulation they forced the quotations of their stock up to 200, then to 300 , then to 800 and finally to 1050 . As the stock advanced they offered the holders of government debt the privilege of exchanges at three to one, then at four to one. As their terms with the Government were for even exchanges they thus accumulated a large amount of treasury stock, some of which they were able to sell at the advanced prices and thus to accumulate a temporary dividend fund and one for use in manipulating the market. If the plan could have been carried out in its entirety the profits realized upon the private holdings of the "insiders" would have been immense. The magnitude of the operation and the rapidity of the advance proved to be their undoing. Other promoters came into the market with their schemes and a wild orgy of speculation took place. As usually happens in such a market, the collapse, when it came, was sudden and severe. The exchange of public securities for the company's stock had been achieved, but the speculators were most of them ruined and the public robbed. Strange as it may seem, the company remained solvent. Its new stockholders, most of them the former holders of government obligations, held the stock at varying prices. The Government had to surrender its right to the seven and a half million, and to make the company a
temporary loan of a million pounds in the form of Exchequer bills. It carried out its contract to pay the five per cent. per annum until 1727 and then four per cent., which yielded a corresponding return upon the company's stock. The conapirators were severely punished by loss of office, imprisonment and loss of property. The worst sufferers were those among the public who were tempted to speculate in this and the various schemes which were promoted during the period of the craze. For a long time afterward stock speculation was much in disfavor and "'Change Alley" neglected.

The subsequent history of the company can be quickly told. It existed until 1854 purely as an investment corporation holding government debt, receiving the interest thereon and disbursing it to its stockholders. Finally in 1854 the last of the debt was paid and the company liquidated.

## Chapter XVII

## State Lotteries and Lottery Loans

$$
\left(1694^{-1826}\right)
$$

THE first lottery loan was raised in 1694. The lottery principle had long been known and used on the Continent and was not entirely new to England.

## The First English Lotteries

The first English lottery of which there is any record was one projected in the reign of Elizabeth and issued under her patronage in the year 1569 . The bill announcing it states that "the same Lotterie is erected by her majestie's orders to the intent that such commoditie as may chaunce to arise thereof, after the charges borne, may be converted towardes the reparation of the havens and Strength of the Realme, and towards such other publique good workes." We have no record as to the amount which it yielded.

A loan by lottery was raised in the time of James I, the proceeds being used to defray the expenses attending the establishment of the colonies in America.

The first lottery loan of King William III was for $£_{1,000,000 \text {. It was offered in shares of ten pounds. }}^{\text {. }}$ Annuities of $£_{14}$ per cent. for 16 years were variously apportioned, $\boldsymbol{£}_{14}$ per cent. on every share and a larger proportion for the holders of 2,500 fortunate tickets. The principal prize was $£_{1,000}$. The annuity of $£_{140,000}$ was made a charge upon the salt duties. The operation was called the Million Lottery and the annuities the Salt Lottery Annuities.
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There were seven lottery loans from 1711 to 1714 in the reign of Queen Anne which yielded to the Government $£_{9,000,000}$, but the bonuses paid to the holders of fortunate lottery tickets amounted to $£ 2,734,000$.

The use of State lotteries in connection with the SpanishAustrian War financing, 1745-1748, gave a guise of respectability to this method of raising money. It is not surprising, therefore, to find that bridges were built over the Thames, and the British Museum founded with funds derived from lotteries.

## Lottery Loans in the American War

It was in connection with the financing of the American War (1775-1783) that the lottery loan had its greatest vogue.

The loans offered were all on.the lottery basis. They were sold at a progressively heavg discount. In 1776 for $£ 2,000$,000, the Treasury offered for every


The next loan was in $4 \%$ stock at par with 2 ios short annuity; the two following were in $3 \%$ atock at par with more liberal annuities. Then came another at $4 \%$ at par with an annuity. Finally with the growing necessities of the Government and increasing depreciation of government atock it was necessary in 1781 to offer, for $\mathrm{E}_{12,000,000}$ in cash, $\mathrm{E}_{18,000 \text {,- }}$ 0003 per cents and $£_{3,000,000}$ fours. Again, in 1782, for £ $13,500,000$ cash, the Treasury gave the same amount in threes,
$50 \%$ additional in fours and a liberal annuity. The loans of 1783 and 1784 were placed on substantially the same basis, although it was found necessary in 1783 to give only $25 \%$ in fours, but in 1784 it was necessary to give $50 \%$ again, but a smaller annuity was given.

Every one of these loans carried the privilege of purchasing, at $£$ ro each, a certain percentage of lottery tickets. For instance, in connection with the $£ 6,000,000$ loan of 1778 there were 48,000 lottery tickets. Each subscriber of $£ 1,000$ received an equivalent amount of $3 \%$ stock and an annuity for 30 years of $£ 2$ ros on each $£ 100$, practically $5 \frac{1}{2} \%$ for 30 years, with the privilege of purchasing eight lottery tickets for an additional payment of $£ 80$. In the case of the loan of 1782 a subscriber of $£_{1000}$ received $£_{1000}$ in $3 \%$ stock, $£ 500$ in $4 \%$ stock and a long annuity of 17 s 6 d on each $£$ foo. He also might subscribe for three lottery tickets.

The prizes, which amounted to the total sum paid fog the tickets, were not funded as they had been at other times, but were paid in cash to the holders of the fortunate tickets in the Spring of the following year. It would thus appear that the Government made no direct gain from the lottery itself, acting merely, as it were, as an agent or stakeholder, being benefited by the incentive given to the public to take the loan.

## How the Loans Were Placed

An intelligent contemporary writer has given us a record as to how the Chancellor of the Exchequer was accustomed to place loans during this period. He tells us that it was usual for the minister to confer in private with a few moneyed men as to the terms of the loan and thus to determine a basis which would be acceptable to the market.

We are not advised whether at this time the bankers "un-
derwrote" the sale of the loan, but we know that at a later date it became customary for them to purchase the loan in bulk and then to distribute it to their patrons at a moderate advance. When a new loan was contracted prior to the payment of the last instalment of a preceding loan, it was usual to give the preference to the contractors for the preceding loan.

As it was illegal for a private individual to pay or receive over $5 \%$ interest for money, it was apparently deemed improper for the State to offer a higher rate. Therefore in order to draw capital to the Exchequer it was deemed necessary to make the offering attractive in other ways than by directly giving a higher rate of interest. The Treasury officials seem to have thought chiefly about the addition which the debt charge would make to the budget. They were not much concerned about the nominal par value of the debt. On the other hand the bankers naturally desired terms which would make the loan attractive to the public and thus readily negotiable. At the same time they very naturally wanted such terms as would afford opportunities for 2 handsome profit on their part, if not at the time, at any rate in the subsequent dealings in the market. Hence it became customary during Lord North's incumbency of the Exchequer, as already stated, for every $\mathrm{f}_{1000}$ in money to give $3 \%$ and $4 \%$ stock, either or both, equivalent in market value to the money to be advanced, with an annuity in addition, in some cases, and, in every instance, with the privilege of purchasing a certain percentage of lottery tickets. The subscription was still further "sweetened" by making the money payable in installments over a period of months, the purchaser being entitled to all interest accrued from the date of the loan. This last privilege amounted in some cases to as much as two-fifths of a year's interest.

For the payments against each class of obligation issued receipts were given. These receipts were called "scrip." When handled together they were spoken of as the "omnium." Transactions during the period before the loan was paid up in full might be either in the several classes of "scrip" or in the "omnium." The subscriber had the privilege of paying in full, which privilege if exercised entitled him to a cash discount.

The way in which the dealers and investors in government loans estimated the market value of the "omnium" was this: The lottery tickets always had an independent market. Experience showed that an immediate sale could be made of these tickets at a profit of from 2 s to 3 s each, depending upon the total amount of tickets in the lottery. The value of the 3 per cent. or 4 per cent. stock received was determined by current stock exchange quotations. For example, in 1782, when the Exchequer offered £20,250,000 par value for $^{2}$ $£_{13,500,000}$ in money the account worked out something as follows:

For $£ \mathrm{foc}$ the subscriber received

> Ist $£ \mathrm{f} 00 \mathrm{3} \%$ stock having a market value of, say .

2nd $£_{50} 4 \%$ stock having a market value of, say.40

3rd A long annuity for 17 s 6 d , whose capitalized value would be about 17 I 3 4th Three-tenths of a lottery ticket by which he would have a profit of, say .
5th Discount, due to the fact that the stock when issued carried about two-fifths of a year's accrued interest for which the subscriber was not required to pay

Total.
$\qquad$
Total. . . . . . . . . £120 2

It does not necessarily follow that these prices were realized by the lenders. For instance, the price of $3 \%$ stock fluctuated in 1782 between 61 and 5338. However, the terms of the loans at this period were liberal and the opporcunities for profit were good.

The different classes of scrip were actively dealt in in 'Change Alley, as a large speculative account could be carried with a very small amount of cash capital. The subscription receipts paid in full were called in the Alley "heavy horse," while the part-paid certificates were known as "light horse." The "light horse" was the popular variety for speculative purposes and therefore commanded a relatively better price. This was because it took much less capital to carry a given par amount, while the percentage of profit, if a profit were realized, would be larger.

## The State Lotteries 1784-1826

We may now conveniently give the further history of the State lotteries.

After $178_{4}$ the practice was discontinued of attaching lottery achemes to loan flotations, but until 1823 a certain percentage of the annual requirements of the Exchequer was regularly provided from the proceeds of the sale of lottery tickets.

There were no lotteries in 1824 and 1825; and in 1826 the last State lottery was drawn. Ashton, in his "History of English Lotteries," tells us that the method pursued by the Chancellor of the Exchequer in placing the lottery tickets was to invite a few of the leading stock brokers to a conference, in which he would state his views. He would tell them that he intended to issue a lottery for, say, $£_{500,000}$ in $£_{10}$ tickersall to be distributed as prizes. He would then ask at what
price they would tender for them. A competition would then ensue and finally an offer might be accepted of, say, five pounds premium a share, which would give the Government a clear profit, without risk, of $£ 250,000$. Of course, those who got the concessions put up the price of tickets, but as single shares were seldom bought-most people taking a fourth, an eighth, or a sixteenth of a ticket-the rise was not much felt by the public.

Although private lotteries were illegal, nevertheless they seem to have flourished. The example set by the State was followed by people in all walks in life. There were lottery tailors, lottery staymakers, lottery glovers, lottery bàrbers, "where a man being shaved, and paying threepence, may stand a chance of getting ten pounds." There were even lottery shoeblacks. There were frequent cases of suicide traced to the lotteries. These were due to the losing of employers' .money and trust funds by those who were tempted to gamble in this way and to disappointed hopes of gain which perhaps meant the loss of one's entire patrimony. There were many fraudulent practices connected with dealings in the lottery tickets.

The prizes varied, ranging in some instances from as high as $£ 30,000$ down to $£ 500$. There were regular, reputable brokers who made a business of dealing in lottery tickets or shares in tickets. We are told that no small part of the business of the stock broker consisted of dealings in lottery tickets. There were also many disreputable persons who devised all sorts of schemes to make money in connection with the lotteries. One scheme which flourished for some time was, for a consideration, to insure the receipt of prizes. This way in reality pure betting. In return for say, a shilling, a pound would be promised if a certain specified number turned
up. Of course these insurances were illegal, but they were so profitable to the officekeepers, that no penalties could keep them down. Any sum might be insured from one to twenty guineas. The sum charged for an insurance at the commencement of a lottery drawing gradually increased as the drawing proceeded, depending on whether the large prizes came out early or late. The class preyed upon were principally domestic servants. In 1800 it was computed that on an average each servant in the metropolis spent annually, as much as 25 shillings in this reprehensible practice of lottery insurance. This was when the drawing of the lottery was extended over days or even weeks.

As time went on and the evils of lottery became more and more apparent, there was a growing feeling that it should be abolished:-still, it was not until 1826 that enlightened public opinion finally forced its discontinuance.

Those who favored the lottery claimed that properly conducted it was a voluntary tax, contributed to only by those who could afford it, and collected without trouble or expense.

They claimed that most of the evils connected with the lottery had been due to the early practice of protracted drawings. In 1809 this abuse was done away with and the lottery was decided in one day. Ashton tells us that extraordinary efforts had to be made to dispose of the tickets for the last lottery. The public had become disgusted with this method of Government financing and were glad to see it discontinued.

The State lotteries yielded a grosa income of some $£_{45}$ million, but the expenses of management and prizes absorbed over $£_{33}$ million. Thus the net income from this source was about $\mathrm{£}_{12}$ million or about $\mathrm{E}_{218,000} 2$ year for the 55 times between 1755 and 1826 when this method of raising revenue was used.

## Chapter XVIII

## The Sinking Funds

WE may now profitably consider the early sinking fund operations. There were two of these, known respectively as Walpole's sinking fund and Pitt's sinking fund.

## Walpole's Sinking Fund

When Robert Walpole became Chancellor of the Exchequer in October, 1715 , the public debt, including the capitalized value of the annuities, amounted to around fifty million pounds and the annual charge to $£_{3}, 164,000$.

The people were genuinely alarmed at the magnitude of the debt. It had increased during the thirteen years of Anne's reign over 200 per cent. The debt charge had risen from about $£_{1,200,000}$ to over $£_{3}, 000,000$. A capital levy was being seriously urged. It was imperative that steps be taken to quiet the alarm and to stop this discussion about a capital levy which was most distasteful to the moneyed classes. Therefore, Walpole brought forward in March, 1717 a plan for a sinking fund. Before he had fairly launched this plan there was a change in the Government and he was out of the Exchequer for four years, beginning with April, 1717. However, his plan was adopted by Stanhope, his successor, who laid proposals before Parliament on May 20, 1717, which led to legislation appropriating the surplus revenues of the Bank, the South Sea Company and what was known as the General Fund to the redemption of the debt incurred prior to December 25, 1716.

By Christmas, 1727, £6,626,000 of this 'old debt had been retired, but in the interval it had been necessary to borrow 116]
new money so that the debt had actually increased about £2,000,000.

Walpole, with all his ability as a financier, was unwilling to secure a radical reduction of the debt by imposing worthwhile taxation for that purpose. He allowed the quarter of a century between wars to pass with only a nominal debt reduction. After 1727 the sinking fund became inoperative for debt reduction, the funds appropriated to it being diverted to meeting current expenses, in order that the taxation of the landed classes might be reduced. However, as a result of successful refunding operations, chiefly in connection with the South Sea Company's operations as described above, the debt charge was reduced between 1714 and 1739 , by no less a sum than one million pounds.

## Pitt's Sinking Fund

If the people of Walpole's time were appalled at the size of the debt, those living half a century later had good reason to be still more alarmed. In the interval the Seven Years War and the American War had raised the debt fivefold and the debe charge nearly in the same proportion. Therefore, after putting his house in order by introducing needed reforms in taxation and funding the foating debt Pitt, the then Chancellor of the Exchequer, brought forward, in 1786, a plan for a sinking fund which, within a period of forty-five years, would entirely free the nation from debt.

The sinking fund was to be a sure specific against the dangers of a public debt. In fact it was to be a prophylactic which would make it quite safe on occasion to increase the debt. This, because with each increase of debt there was to be an increased fund with which to insure its cancellation.

One million pounds a year was to be taken from revenue
and paid to the Commissioners for the Reduction of the National Debt, in whose favor also the existing life and terminable annuities were, on their expiration, to be continued. The Commissioners were to invest their income from all sources in purchase of the funded debt, until the annual sum received by them amounted to $£_{4,000,000}$, after which dividends on capital stock to be paid off by them, and any life and terminable annuities which should mature, should cease and be considered as redeemed. Subsequently $£_{400,000}$ a year was added to the fund; also a sum equal to the interest saved by any reduction of interest on any redeemable stock; and one per cent. on all new loans issued for public purposes.

## Fallacy of Pitt's Scheme

It is difficult to understand the vogue which this theory had for nearly half a century.

The general principle that money placed at compound interest will double itself at 6 per cent. in about 12 years, at 4 per cent, in about 18 years, and so on, is undeniable, but the error lay in assuming that to buy up and "keep alive" the Nation's own obligations was equivalent to placing the funds of the sinking fund at interest.

If peace had continued for an indefinite period, and if the additions to the fund had scrupulously been made from taxation alone, it would have accomplished its purpose. But this would not have been because of the accumulations from compound interest, but because an amount, determined by such calculations, had in reality been taken from the people in the form of taxation. Strange as it may seem, most of the brightest intellects of the day were confused on this matter. If England could have placed a fund in some
other country, or in Mars, to accumulate at compound interest, the theory and the practice would have been in harmony. So long as the fund had to accumulate at home, it was all one whether a straight annual appropriation for the reduction of the debe were made from revenue, or, an appropriation made determined by the circumlocution of the sinking fund legislation.

However, when, as happened later, the Commissioners borrowed money for the sinking fund, instead of obtaining it by taxation, and when, to cap the climax, they paid more for this borrowed money than the rate of interest borne by the debt redeemed, the situation became a serious one. As Tom Paine tersely and humorously put the case in one of his numerous pamphlets: "As to Mr. Pitt's project of paying off the National Debt, by applying a million a year for that purpose, while he continues adding more than twenty million a year to it, it is like setting a man with a wooden leg to run after a hare. The longer he runs the farther he is off."

The lesson of the ineffectiveness of the cumulative sinking fund, as thus administered, was not learned for a number of years. It was not until 1829 that this fallacious method was finally abandoned, and not until after $£ 330,000,000$ had been raised at an average cost of $£_{5}$ oa $6 d$ per cent. per annum, to pay off debe carrying interest at $\mathcal{L}_{\mathbb{f}} 10$ od per cent. The difference between these two rates is 10 6d per cent. per annum. Therefore, before the nation awoke to its folly it had increased its annual fixed debt charge for this purpose by $\mathcal{E}_{1,628,000}$ !

## Modern Sinking Funds

Finally the discovery was made that the only way to pay off the debt was from an excess of clear revenue, derived from
taxation, over the expenditures for current needs, upon which principle the sinking fund functioned from 1829 to 1914. However, the reduction in debt was small because of the unwillingness of Parliament to make any substantial appropriations for the purpose. The terms of existing sinking funds are given in notes, following the National Debt Statement.

In 1868, and again in 1894, the plan was adopted of issuing terminable annuities in lieu of funded debt. In 1868 £24 million of Savings-Bank stock was cancelled and an annuity of $£ 1,760,000$ substituted, while in 1884 Chancery stock to the amount of $£_{40}$ million and over $£_{30}$ million of post-office-savings-bank stock were similarly treated. Thus the nominal principal of the debt was reduced and the annual charge increased, just reversing the South Sea Company operation of 1720 and before. The advantage of the operation is hard to find, as the Government of course remains obligated to the savings banks' depositors and the estates in chancery for the full amount of their claims.

## Chapter XIX <br> Early Refunding Operations

REFERENCE has already been made, in discussing the affair of the South Sea Company, to the refunding operations prior to 1739 . There were only two refunding operations of importance between 1739 and 1817 .

## Refunding Operation of 1749 -"Consols"

Advantage was taken of the period of peace which followed the War of the Austrian Succession to take measures to reduce the interest paid on the debt to a uniform rate of 3 per cent. At that time the funded debt, apart from that due to the Bank of England, South Sea Company and East India Company, consisted of various debts contracted at different period under several Acts of Parilament and charged on many distinct funds.

Parliament enacted a law in 1749 that all public creditors at four per cent. should be paid the amount of their holdings except those who signified their consent to accept three per cent. after December 25, 1757. These were to have their present interest continued until December 25, 1750, and then to receive 31/2 per cent. until December, 1757. The amount of these debts, including those due to the Bank and the companies was $£_{57,700,000}$ The greater part of the creditors accepted the proposition. A modified offer, not quire so favorable, was made to those who held out and was generally accepted, with the result that the Treasury was called upon to pay off only about $£_{3,000,000 \text {. As a result }}$ of these operations and the payment of $£_{3,000,000}$ navy debt, there was a net decrease, in round figures, of nearly $£ 5,000,000$
in debt before the outbreak of the Seven Years War and a reduction in the annual charge of $£ 539,000$. As an indication of the state of the national credit it may be noted that the three per cents which in 1748 sold as low as 76 advanced to an average price of about par in $1749-1751$, and upon the successful consummation of the refunding operations sold up to $1063 / 8$ in 1752 .

The success of this operation reflected great credit upon the administration. It also gave evidence of the prosperous condition of the country, notwithstanding the long war which it had just passed through.

In the session of 1751-1752 an act was passed consolidating certain of the $3 \%$ issues into one joint-stock of $3 \%$ annuities.

Thus originated the "Consolidated Annuities" or "Consols" as that part of the perpetual debt held by the public has ever since been known.

## Funding the Floating Debt in 1784

In 1784, when William Pitt the younger assumed the duties of his office as Chancellor of the Exchequer, he found outstanding floating debt for over $£_{18,000,000}$, chiefly in the form of navy victualling and transport bills. From the time of Charles II the payments for navy victualling and stores had been made in bills payable at uncertain periods. They were taken at a discount which increased very considerably at every time of war. During the last five years of the American War this discount had varied from II $1 / 2$ per cent. to $163 / 4$ per cent. .

Pitt brought about legislation by which the Admiralty was required to make all of its payments in bills drawn at ninety days. Thereafter, as these bills were always dis-
charged with rigid punctuality they came to be considered and accepted zubstantially at par, with a resultant large saving to the Government.

Of the navy bills outstanding when he assumed office Pitt funded into $5 \%$ stock $£ 6,400,000$ in 1785 and $£ 9,800,000$ in 1786, giving for each $£_{100}$ debt $£_{107}$ ros 6 d in the first instance and filit 8 s in the second. Pitt was desirous of completing the entire transaction in 1785 , but in deference to the views of the bankers spread the operation over two years. In view of his later change of policy in that respect it is of interest to note his statement to Parliament, "that a fund at a high rate of interest is better to the country than those at low rates; that a four per cent. is preferable to a three per cent. and a five per cent. better than a four." He explains"the reason is that in all operations of finance we should always have in view a plan of redemption. Gradually to redeem and to extinguish our debt ought ever to be the wise pursuit of government. Every scheme and operation of finance should be directed to that end and managed with that view."

## Competitive Bidding Inaugurated

Former ministers had made the placing of loans a source of patronage. Pitt resolved to consult the public interest only. He gave notice through the Governor and the DeputyGovernor of the Bank that he was ready to contract for the loan with those who would offer the lowest terms. Sealed tenders were required. He thus established a salutary precedent which has been followed in connection with all subsequent loans not offered at fixed prices. It may be noted in passing that the purchasing of army supplies was placed by him on a similar competitive basis, thus ending scandalous practices of long standing.

## Chapter XX

## Financing the Great French War

(1793-1817)

THE outbreak of the French Revolution in 1789 leading up to the atrocities of 1792 which culminated in the execution of Louis XVI on the morning of January 21, 1793, ushered in a period of internal strife and of foreign wars such as France and the world had never before experienced. With the declarations of war by France in February, 1793, against England, Holland and Spain, the period of peace which England had enjoyed since the American War and the hope of a further similar period was abruptly ended. The administration found themselves face to face with a foreign war, while for some time they had been compelled to deal with dangerous uprisings at home. Thus ended a period of nine years, perhaps one of the most prosperous and happy that England had ever known. It had not been a period of prosperity for all classes, because the radical changes in the conditions of the industrial and agricultural classes had brought cruel hardships to many. However, taking the country as an entirety, it had been a time of decided progress. This period of prosperity terminated in a severe financial crisis and consequent "hard times." A succession of bad harvests caused a scarcity of food and resultant high prices. Throughout the commercial world the war was preceded by "a great revulsion and derangement of commercial credit." There were many failures of mercantile houses, while no less than 26 country banks were forced to close their doors. In April, 1793, the distress became so acute that the Government $124]$
found it necessary to apply extraordinary remedial measures. At a meeting of merchants held at the Mansion House on the 23d of April it was voted to apply to Mr. Pitt to advance Exchequer Bills on the security of goods and merchandise and other property. The request was referred to Parliament and on the 29th of April, Exchequer Bills to the extent of $£_{5}$ million were ordered applied to advances. This measure proved to be very successful in allaying fear and distrust. The fact that assistance could be obtained if needed made it unnecessary in most cases to ask for it.

## The Loan of 1793

It was in such a market as this that William Pitt was compelled to arrange for his first war loan of $£_{4,500,000 \text {. This }}$ loan was obtained by a sale of 3 per cent. consols at 72, making the money cost about $4 \% \%$ per annum.

The effect of the business crisis had been to carry down the price of consols from quotations of around 90 which had been current during August, September and October, 1792 , to below 80 in the latter part of November. Quotations in January, 1793, had averaged about 75. Upon the declaration of was they broke to 72 and under, so that Pitt's bargain was a fair one for the Exchequer, although prices rallied almost immediately to around 77 and did not go below 74 during the rest of the year. The choice of the 3 per cents, while contrary to Pitt's previously expressed preference for stocks at higher interest rates and therefore selling nearer to par, was fully justified by the fact that thus a better bargain for the Exchequer could be made, as the fours and fives were selling relatively much lower-that is, on a higher interest basia.

The war thus entered upon lasted until the middle of the
year 1801, although the formal signing of the articles of peace at Amiens did not take place until March, 1802 .

The war ended in a draw. One by one the other antagonists dropped out until England and France alone were involved. Each nation was ready for a cessation of hostilities. Nothing had been decided and in the settlement Great Britain gave up practically all acquisitions of territory which she had made. Great Britain expended during the nine years about four hundred and twenty million, 60 per cent. of which represented the cost of maintaining the army and navy, against a normal peace expenditure of about one-fifth of this amount. The interest and management of the debt absorbed another 30 per cent. so that over 90 per cent. of the expenditure of the period may be said to have been due to war-past and current. Of this great sum, which was twice the average expenditure during the period of the "extravagant" American War, 55.60 per cent. was raised by taxation and the remainder by borrowing.

## The Loyalty Loan of 1796

During this period there were eighteen different loan negotiations. We have seen that the first loan was placed at a little over 4 per cent. In 1794, 1795, and the early part of 1796 it was necessary to pay over $41 / 2$ per cent. In December, 1796 , the money cost over $51 / 2$ per cent., while in 1797 and 1798 it cost from $61 / 2$ to $63 / 4$ per cent. In 1799 and 1801 , $5^{1 / 2}$ per cent. was paid, but in 1800 over $£ 20,000,000$ was secured at about $43 / 4$ per cent. Most of the loans were issued as'threes with annuity bonuses and in some cases with a percentage in fours. The rate on Navy and Victualing Bills, issued as fives repayable after relatively short periods, was substantially higher than that paid on the annuities. The
average actual rate paid on all loans, long and short, was almost exactly $51 / 4$ per cent.

The Loyalty Loan issued in December, 1796, was offered for public subscription, books being opened at the Bank. It was a year of great difficulty. The progress of the war had been discouraging. There had been a run on the Bank involving a suspension of specie payments. There had been a serious mutiny in the navy, and symptoms of discontent appeared in the army. Under these circumstances, with the pressure of taxation keenly felt, the ministry believed that a resort to the ordinary methods of raising a loan would be perilous. It was determined, therefore, to throw the subscription open to the public and to appeal to the patriotism of the country.

This course was fully justified by the outcome. Within fifteen hours the entire $£_{18,000,000}$ was oversubscribed. However, the loan was at four per cent. discount before the payment of the deposit. This discount afterward became 8 per cent. and finally 14 per cent., but every payment was duly made.

## Final Period (1803-1815)

Such a peace as that signed at Amiens was not destined to be permanent. British statesmen felt that it was dangerous to give such an antagonist as Napoleon time in which to grow strong. They therefore took advantage of a dispute in regard to the disposition of Malta to renew the war in May, 1803, and thus to arrive at a settlement which would be conclusive. Notwithstanding the fact that they caught Napoleon unprepared, the war proved to be one of long duration. The burdens which it imposed in the form of taxation and debt, deranged industrial conditions and unsettled commerce were tremendous. It has been said that it was a war of the

English people rather than of great leaders. Pitt, who had dominated the first period, was out of office when hostilities were renewed. Although temporarily called back under the stressed conditions of 1804 he had only been at the head of the Government a couple of years when he died in 1806, brokenhearted at Napoleon's apparent invincibleness. Thus we find no one master mind dictating the financing of this period.

## The Cost of the War

During the second period of the war, terminated by the treaty of Paris, signed November 20, 1815 , the annual expense just about doubled that of the first period. Eliminating an estimated normal expense based upon the budgets of the last preceding peace period the average annual war expense of the first period of the war was approximately twenty-eight million and of the second period sixty-two million.

Taking the entire period of 23 years of war into consideration the total cost in round figures was about $£_{\mathrm{I}, 200}$ million, a yearly average of $£ 52,150,000$. This total is accounted for as follows: Direct increased military and naval expenditure, $£ 826,223,000$, increased cost of civil government $£ 111,212,-$ 000 , increased debt charge $£ 262,077,000$. The extraordinary expenses of 1816 are included in these figures as the accounts of this year were still considerably affected by the aftermath of the war. In making estimates such as this most writers include only the direct military expense. This manifestly leads to an underestimate. The increased cost of civil government due to the war conditions should surely be taken into consideration and there should be no difference of opinion as to the propriety of including the increased burden of the
national debt, to the extent that the increase in debt is caused by the financing of the war.

It is unfortunately true that with each recurring war there is not only a permanent addition to the debt charge, but also to the cost of civil government, while the military expenditure rises to a new level.

Furthermore, each recurring war costs more for each year of war than does its predecessor. The first three wars occurring after the Revolution cost on the average four million sterling, for each year of war; the next, 12 million; the next, 13 million; the first part of the Great French War, 28 million, and the last, 62. The two other great wars of England preceding the greatest of all which has just ended-namely, the Crimean and the Boer Wars-cost on the average, respectively, $\Sigma_{24}$ and $£_{70}$ million for each year of war. This is not a place to moralize, but the mere statement of the facts alone is an eloquent indictment of war as a method of settling international disputes. How frequently we find upon the conclusion of a war that the articles of peace in no way refer to the ostensible cause of the war. Still, if ever a war'was really justified, this ewenty-three-year war of England's was such a one-the first part of it a stand against the spectre of world anarchy and the second against the overweening ambition and autocratic plans of Napoleon.

## The Cost Met from Taxation

The financing of the war covered the Exchequer period from October 10, 1793, to January 5, 1817. It is impossible to give the statistics with absolute accuracy, as in 1801 a change took place in the method of stating the accounts. Prior to that date the returns are on a "net" basis-that is, the cost of collection and management of the revenues is
deducted therefrom. Thereafter the gross revenue is given and the expenses of collection are stated on the other side of the account. The returns are said to be on a "gross" basis. Therefore, for part of the period under review we have "net" returns and for part "gross" returns. However, this fact does not seriously interfere with securing a review of the finance of the period.

The striking thing to note is that eliminating all items having to do with the debt, the other expenses were entirely met from revenue collections. The expenses of civil government averaged $£ 6,708,000$ a year and the military expenses $£_{39,213,00}$, an aggregate of about 46 million. The revenue receipts averaged $£_{49,575,000}$ a year; or, taking the aggregate figures for the 24 years, civil and military expenses were $\boldsymbol{£}_{1,117,656,000}$ and revenue receipts were $£_{1,202,195,000}$.

It was during this time that pamphlets without number were being issued from the press in regard to the debt, its great and growing burden, the necessity for the cost of wars being met by the generation which carried them on and the blessings and operations of the sinking fund.

The borrowing which took place provided the means for temporarily bridging gaps between expenditure and revenue, for meeting the interest charge on the inherited debt and for feeding the sinking fund which, strange to say, was adding to the debt instead of reducing it. For the 24 years the charge for the interest and management of the debt was $£_{511,306,-}$ 000-£227,655,000 on account of pre-war debt and $£ 283$,651,000 on account of new debt.

The operations on account of the debt ran into heavy figures as will be seen from an examination of this table.
SUMMARY OF DEBT OPERATIONS
Great French Wars
October, 1792-February, 1817
In Millions Sterling

Thus the net benefit to the Exchequer from net borrowings of $£_{434}$ million, moncy values, was only £ $_{151}$ million, $113 \%$ of the gross amount borrowed, sufficient with say $£ 77$ million from revenue to pay the charge of $£ 227,655$,00 for the pre-war debt.

In 1793 the total debt was $£ 239,663,000$. On the 5 th of January, 1817, it was $£ 850,000,000$, an increase of $£ 610$,-337,000-par value. The debt charge meanwhile had increased $£_{22,623,000, ~ f r o m ~}^{£_{9,43}, 0,000}$ to $£_{32,055,000}$. Mr. Chisholm, in his monumental report on the debt, estimates that of the net amount borrowed during this period about one-third-say, $£_{192,868,000-w a s ~ r e q u i r e d ~ f o r ~ t h e ~ s i n k-~}^{\text {- }}$ ing fund. The annual charge for interest on the new money borrowed was $£_{5} 3 \mathrm{~s} 9 \mathrm{~d}$ per cent., while the similar charge on the debr redeemed by the sinking fund was $£_{4} 1688 \mathrm{~d}$ per cent. The difference between the two rates of interest, equal to 78 id per cent., is the annual amount lost by the sinking fund operations on the £192,868,000 redeemed; or, at the rate of about $£ 683,000$ added fixed charge per annum.

## Debt vs. National Wealth

The burden of the debt upon the community, while heavy, was by no means "crushing," a term by which it has frequently been described.

The per capita debt was about fifty pounds sterling, or not quite one-third of the estimated per capita national wealth. At the close of the American War, another period when the debt was "crushing," the per capita amount was estimated at about $£ 29$ and the debt at about 25 per cent. of the national wealth. These estimates all deal with par values.

## Debt Charge vs. National Income

On account of the policy of discount financing pursued in the negotiation of loans, a better way to judge of the actual burden of the debt is to institute a comparison between the annual charge for interest and maintenance and the estimated national income. The growth in national income had been very great since the beginning of the American War in 1775. At that time the national income was estimated to be froo,000,000 . At the close of that war an increase of about 25 per per cent. is estimated to have taken place. At the beginning of the Great French Wars the people of England were probably in receipt of an aggregate income of $£ 160,000,000$. So far our estimates apply only to England and Wales. In 1802 we may add Scotland and, too, we are now dealing with more reliable figures, as we begin to have the income tax returns as a basis. We seem to be warranted in accepting an estimate of $£_{230,000,000}$ for the national income at this date. At the close of the Napoleonic wars in 1815 we have an estimated income for the 17 million people of the United Kingdom of Great Britain and Ireland of $£ 400,000,000$.

It is believed these estimates fairly reflect the facts, for we know, notwithstanding the toll of the wars, that the population had been rapidly increasing; also commerce, as evidenced by the increase in shipping and in the values of exported and imported goods; also the volume of business, as evidenced by the steady increase in the yield of the income tax and the fact that the people at the same time were able to pay the enormous excise taxes.

Therefore we seem to be justifed in accepting them as a measure of the burden of the debt at the times indicated and of its comparative weight. So we arrive at the interesting summary statement contained in the table on page 134 . In interpreting this table the fact should not be lost sight of that the purchasing power of money has varied considerably during the two and a third centuries. The relative burden of the debr cannot be judged merely by comparative seatistics in terms of money. If we had index numbers of prices such as exist today covering the entire period and could adjust money values accordingly we would probably discover that today's burden is relatively not materially greater than at other crucial periods.

This table demonstrates in a striking manner why it was, notwithrtanding all the direful prophecies of disaster which were made at all of these periods, that after each war England shook herself like a great ship coming up out of the trough of a stormy sea and went on her way unscathed. That reason was because, although one of the oldest of the nations, she was nevertheless full of vitality and rapidly growing in population and in material resources. Students of this period point out that because of the integrity of property and contracts in England, she became to an important degree during the great war the custodian of the savings of Europe. Thus

THE BURDEN OF THE PUBLIC DEBT
At the Close of Various Historical Periods to the end of the Great French War 1688-1817
Population, Total Charge and National Income in Millions

| Period | Ended | Population | TTotal Charge | Change from Previous 8 Period | Average Interest Rate | National Annual Income |  | Charge per Capita | Charge Per Cent. Income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Total | Per Capita |  |  |
|  |  |  | £ | £ | \% | £ | £ 8 | £ s | \% |
| Wars of William III | Sept. 29, 1697 | * 512 | I,3 | . | 7.18 | 43 | 85 |  | 3.08 |
| Peace - | * 29, 1701 | 5, 1 | I,2 | , $r$ | 7.87 | 43 | 88 | 5 | 2.80 |
| Wars of Anne | " 29, 1714 | 5,2 | 3,0 | 1,8 | 6.28 | 46 | 817 | 12 | 6.65 |
| Peace | " 29, 1739 | 5,8 | 2,0 | $\boldsymbol{r}$, | 4.17 | 60 | 107 | 7 | 3.36 |
| Spanish-Austrian Wars . | * 29, 1749 | 6,0 | 3,2 | I, 2 | 3.98 | 64 | 1013 | II | 4.98 |
| Peace ${ }^{\text {a }}$. | " 29, 1755 | 6,2 | 2,6 | ,6 | 3.49 | 64 | 106 | 8 | 4.13 |
| Seven Years War | ${ }_{4}{ }^{\text {a }}$ 29, 1766 | 6,9 | 4,8 | 2,2 | 3.65 | 75 | 1017 | 14 | 6.48 |
| Peace . ${ }^{\text {d }}$ | 4 29, 1775 | 7.5 | 4,6 | , 2 | 3.55 | 100 | 137 | 12 | 4.65 |
| American War | Oct. 10, 1785 | 8,2 | 9.5 | 4,9 | 3.90 | 125 |  | 13 | 7.63 |
| Peace . ${ }^{\text {a }}$. | * 20, 1792 | 8,7 | 9,3 | ,2 | 3.90 | 160 | 189 | 1.1 | 5.81 |
| Great French War Ist Period 2nd Period | Jan. ${ }_{4}$ 5, 1802 | $\dagger$ 11,0 | 19,8 | 10,5 | 3.83 | 230 | 2018 | 116 | 8.61 |
| 2nd Period | - 5,1817 | \$17,0 | 32,0 | 12,2 | 3.77 | 400 | 2310 | 117 | 8.01 |

[^2]she was enabled to finance her trade on an ever increasing scale as well as to finance the stupendous costs of the 23 years of war. Sowing and reaping in national finance is thus illustrated.

Another moral phase of the situation which cannot be tabulated but which is at the base of England's credit structure, is that not once apparently was there even a thoughe of repudiation-even when the burden of debe pressed heaviest. Fears there were in plenty of the ability of the nation to continue to meet its obligations, but never once a suggestion of trying to get rid of the obligations in any other way than the good old-fashioned one of paying.

## Chapter XXI

## Revenue and Expenditure

(1688-ェ817)

DURING the centuries which preceded the English Revolution of 1688, the Englishman had held the reins over his autocratic rulers and had finally won a state of comparative political freedom by his control of the purse.

The King's hereditary revenues were passed on from one sovereign to the next, also those of which it was customary for Parliament to make a life grant at the beginning of each reign. However, Parliament retained absolute control over other sources of revenue which it voted from year to year. Thus, by making it necessary for the King to call them together to vote at least a part of the supplies, the Commons were able to control, to some extent at least, the acts of the King.

When William III consented to assume the responsibilities of the throne in 1688 he expected that the usual grants would be made to him. To this Parliament in part demurred. No change was made in respect of the hereditary revenues, but Parliament declined to make the usual life grants. Instead, the revenues usually so granted were made renewable at the end of four years.

Thus was confirmed, or more properly reasserted, the principle of a short grant of some considerable branch of the revenue with a view to keeping the sovereign dependent upon the will of Parliament.

It is not our purpose to consider in detail the various forms of State expenditure, nor do we intend to take up in detail 136]
the methods of raising revenue during the period under review.

## Purposes of Expenditure

The boad general purposes of expenditure were, as they are to-day, the expenses of civil government, the expense of the maintena.sce of the military establishment and the charge for the interest apon the national debt.

An inspection of the table on page 138 will show how these expenses grew from one historical period to another.

The table is arranged to show the average annual expenditure for each period oif peace and of war from the Revolution until the end of the French wars, and for the peace period immediately following.

The important facts to notice are the progressive increasing expense of each war period and the fact that after each war the level of peace expenditure is raised.

## The Grousing Burden

It will be observed that the war period of the reign of William III cost on the average about five million pounds a year. The militaristic administration of Anne cost half as much again. During the Seven Years War the expenses were double those of Queen Anne's reign. During the American War they were fifty per cent. higher than during the Seven Years War. For the first part of the Great French War the expenses were double those of the American War period, while the expenses of the last part of the French war averaged nearly twice those of the first part. With these figures in mind let us now turn to the record of the intervening peace periods. Here we find this interesting requence-we will use round figures. Following the peace of Ryswick in 1697,
the average annual budget was $£_{3,800,000 \text {; after the peace }}$ of Utrecht in 1713, about $£_{5,700,000 \text {; after the peace of }}$ Aix la Chapelle in 1748 , $£ 6,600,000$; following the peace of Paris in $1763, £ 9,900,000$; after the peace of Versailles in 1783, £16,600,000; while looking ahead into the next period we find that for the years immediately following the peace of Paris in 1815, peace expenses rose 40 a new level of $£ 56$ million a year.

It is true that a most important part of the growing cost of government was due to the cumulative effect of the charge for the growing public debt. Again it seemed to be considered necessary after each war to maintain the military establishment on a new level of expenditure. Still, even the expense of civil government, the strictly peace establishment, exhibited the same tendency to expand. The table follows:

GOVERNMENT EXPENDITURES 1688-1830
Average per Annum for Alternate Periods of War and Peace In Millions Sterling

| Period | Character of Period | Peace | War |
| :---: | :---: | :---: | :---: |
|  |  | £ | £ |
| 1688-1697 | Ware of William III |  | 5,1 |
| 1698-1701 | Peace | 3,8 | $\ldots$ |
| 1792-1714 | Wars of Anne | $\ldots$ | 7.6 |
| 1715-1739 | Peace | 5.7 | $\ldots$ |
| 1740-1749 | Spanish-Austrian Wars | $\ldots$ | 9.5 |
| 1750-1755 | Peace | 6,6 | ... |
| 1756-1766 | Seven Years War |  | 14.5 |
| 1767-1775 | Peace | 9.9 | ... |
| 1776-1785 | American War | $\cdots$ | 21,8 |
| 1786-1792 | Peace - . | 16,6 | ... |
| 1793-1802 | 1st Period-Great French War |  | 45,4 |
| 1803-1817 | 2nd Period-Great French War |  | 80,5 |
| 1818-1830 | Peace | 56,2 | ... |

## Sources of Income

Let us now turn to the other side of the account and see from what sources the income was derived with which to meet these constantly growing expenditures. Here we have some surprises awaiting us, particularly when we come to the period of the Great French War. Again we will deal with the average annual figures, as this is the only way in which we can make a comparative study. Taking first the revenue from other sources than borrowing, we find that the excise taxes were most productive, then the customs and then the land and house duties. The stamp taxes first began to be of importance in the period following the American War. During the second part of the Great French War the income tax assumed great importance, yielding almost as much as the customs.

Now we come to the interesting and surprising phase of the situation. From the stress which has been put upon the growth of the debt it might be assumed that the greater part of the cost of the wars and of the growing expenses of all kinds had been obtained by mortgaging the future. As a matter of fact, just the reverse is true. Most surprising of all, the really stupendous expenses of the Napoleonic war-the second half of the Great French War period-were met chiefly from taxation, the exact percentages being 79.70 from taxation and 20.30 from borrowing.

The table of Government income following, prepared to cover the same historical periods as in the case of the Expenditure table, may be studied with profir.

GOVERNMENT REVENUE 1688-1830
Average per Annum for Alternate Periods of War and Peace
In Millions Sterling

| Period | Character of Period | Peace | War |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Tax | Tax | Debt | Total | Tax | Debt |
| 1688 | Wars of William III | £ | $£$ | $\boldsymbol{\varepsilon}$ | $\underset{5}{f}$ | $\%$ | \% |
| 1698-1701 | Peace . . | 4,5 |  |  |  |  |  |
| 1702-1714 | Wars of Anne |  | 5,4 | 2,3 | 7,7 | 69.55 | 30.40 |
| 1715-1739 | Peace | 5,9 |  |  |  |  |  |
| 1740-1749 | Wars . - . |  | 6,6 | 3,0 | 9,6 | 68.91 | 31.08 |
| 1750-1755 | Peace | 7,1 |  |  |  |  |  |
| 1756-1766 | Seven Years War |  | 9,r | 5.5 | 14,6 | 62.62 | 37.37 |
| $1767-1775$ <br> $1776-1785$ | Peace <br> American War | 10,7 | 12,7 | 9,4 | 22,1 |  | 42.61 |
| 1786-1792 | Peace | 17,0 | 12,7 | 9,4 |  | 57.39 | 42.61 |
| 1793-1802 | 1st Period French |  | 26,2 | 20,9 | 47.1 | 55.60 |  |
| $1803-1817$ | 2nd Period) War |  | 64,4 | 16,4 | 80,8 | 79.70 | 20.30 |
| 1818-1830 | Peace - | 68,0 |  |  |  |  |  |

## Chapter XXII

## Peace and Social Betterment

$$
(1817-1914)
$$

WE have just been atudying the finances of a period the dominating note in which was war. It was also the period when the greater part of the English debt, as it stood prior to the recent world cataclysm, was created. We now enter upon the study of a period where peace was dominant. During the century there were two important wars and a number of military expeditions, but as these were all fought at a distance, they acarcely interrupted the course of eventa at home.

The period is one of intense interest to the social reformer, to the economist and to the publicist. For the student of public finance it is chiefly memorable as a time within which the methods of taxation were greatly simplified. A digtinguished succession of finanice ministers, notably Peel, Disracli and Gladstone, introduced and successfully established innovationa in State finance of far-reaching importance.

## Sources of Revenue—Tariff Reform

During this period England was transformed from a country surrounded by high tariff walls to one practising free trade in its most extreme form. From the standpoint of finance this resulted in reducing the number of classes of commodities upon which customa duties were collected from 1200 in 1842 to 466 in 1853 , and to only 48 in 1860 . By 1880 the number of classes of articles upon the tarif had been reduced to ten. In 1914 substantially the entire customs revenue was 141]
derived, in the order named, from tobacco, tea and sugar and from spirits in various forms, including motor spirits; although cocoa and its preparations, and coffee, together yielded almost as much as spirits. Notwithstanding this radical change in the customs tariff, the revenue from this source remained fairly uniform during most of the period, but with a marked tendency to increase during and following the period of the Boer War. The income from the excise taxes steadily increased during the century. The remaining important sources of revenue were the income and property tax, the estate duties, and the stamp taxes. The income tax was discontinued at the close of the French Wars to be reimposed in 1843 and has been of growing importance ever since, finally becoming the most important source of tax revenue in the financing of the recent war.

## Character of Expenditure

Turning now to the purposes for which the money of the State was expended during this century we face a situation of great interest.

First of all we find that the expenditure for the payment of the interest upon the debt in the fiscal year ended March 31 , 1914, was $£ 24,500,000$, a reduction of only $£ 8,400,000$ from the year 1817 when the maximum charge was reached, showing that no determined effort had been made during this long period of comparative peace to get rid of this burden.

## Military Expenditure

In the next place, we discover that the military expenditure steadily grew during the entire period. The Crimean War cost $£_{73}$ million, or at the rate of over $£_{24}$ million a year for the three years (1854-1857) affected by the
financing of that war; but, eliminating this special feature, we find the cost of the military establishment in time of peace steadily mounting, until in the four years preceding the Boer War it averaged over $£_{40}$ million; more than the average military expense during the Great French War, although some five million less than during the most expensive period of that war. The Boer War cost $\mathrm{E} 28 \mathrm{r}^{\mathrm{r}}$ million, bringing the entire military expense for the period ( $1899-1903$ ) up to $£ 70$ million a year. However, for the peace period of over ten years following that war the military burden averaged annually over 50 per cent. higher than it had averaged in the four years preceding the war. In the fiscal year ended March 31, 1914 the military establishment cost over $£_{77}$ million.

## Civil Government Expenditure

Let us see, now, what the statistics of the cost of civil government show, eliminating after 1870 expenditures for postal services, because these were offset by a corresponding or greater income. We find that the record can be allocated roughly to three periods. Down to the time of the Crimean War (1854-1856) these expenditures called on the average for about nine million pounds a year, increasing during the last decade to about ten million. They then reached a new level, ranging from an average of about $£_{12,500,000}$ during the period of the war to an average of alightly under $£_{23}$ million during the five years of Gladstone's administration ending in 1874

Thereafter they mounted rapidly until in 1914 they had reached over $\mathbf{£}_{\mathbf{7 5}}$ million or substantially the same as the military expenditure. They had run neck and neck with the military expenditure for the previous six years.

The following table will visualize this last statement:

CIVIL GOVERNMENT vs. MILITARY EXPENDITURE In Millions Sterling


The explanation of this steady increase in the cost of civil government is to be found in the awakening of the civic conscience to the duty of the State to its citizens. As we have already noted, in 1839 Parliament for the first time voted a small sum for public education. By 1854 the expenditure for this purpose reached $£ 559,000$-twenty years later it was more than four times as great. In another twenty years the expenditure for this purpose had again quadrupled, while in 1914 it was over nineteen million pounds, twice the 1895 amount. To complete the record we may note that this sum had again doubled in the year ended March 31, 1920 and that the budget figure for the current year (1920-2I) is $£_{56}$ million. The introduction of old age pensions in 1908 and of health insurance in 1911 added another similar amount to the annual expenditure by 1913-1914, and these expenditures tend to increase in almost a spectacular way. For example, in 1919, with scarcely a word of objection, old age pensions were increased by Parliament by an estimated annual sum of about £10 million, bringing up the estimated future annual expenditure for this purpose to about $£ 28$ million.

The following table, giving the distribution of the civil government expenditure at the end of historical periods from 1833 to 1914 inclusive, offers further interesting data.

## CIVIL GOVERNMENT EXPENDITURES

For the Closing Years of Historical Periods
In Milliona Sterling

| Fiscal Year Ended | - Con-soli- <br> dated Fund Services | Public <br> Works and Buildings | Salaries and ExPublic Department | Law and Justice | Education, Science and Art |  | Oid Age PenEions and Insurance | Non-EI lective, Charitable and Miscel. laneoue | Collecting Revenue | Local <br> Pur. <br> poren <br> and <br> Capital <br> Expen- <br> diture | Poat. <br> Office | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1833 | 1,8 | 0,3 | 0.5 | 0,3 |  | 0,5 |  | 1,3 | 3,8 |  |  | 8,5 |
| 1842 | 2,4 | 0,2 | 0,7 | 0.8 | 0,3 | 0.4 |  | 0.9 | 3.7 |  |  | 9.4 |
| 1854 | 2.5 | 0,8 | 1,1 | 1,1 | 0,5 | 0,3 |  | 0,8 | 4.3 |  |  | 11,4 |
| Mch. 31 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1867 | 1,8 | 0,8 | 1,5 | 2,9 | 1,4 | 0,5 |  | 0.8 | 4.8 |  | 0,8 | 15.3 |
| 1874 | 1,6 | 1,1 | 1.9 | 4.3 | 2,4 | 0,6 |  | 0,6 | 2,6 | 7.3 | 2,7 | 25,1 |
| 1886 | 1,6 | 8.7 | 2,4 | 6,2 | 5,2 | 0,6 |  | 1,2 | 2,7 | 16,3 | 4.7 | 42,6 |
| 1895 | 1,6 | 1,7 | 2,0 | 3,6 | 9.7 | 0,7 |  | 1,0 | 2,6 | 4.2 | 6,8 | 33,9 |
| 1903 | 1,6 | 2,3 | 2,5 | 3,8 | 13.3 | \$13,3 |  | 0,9 | 3,0 | 17.8 | 14,6 | 73.1 |
| 1914 | †3, ${ }^{1}$ | 3,3 | 4,3 | 4,5 | 19.4 | 1.5 | 19.7 | 1,1 | 4.5 | 13,8 | 24,6 | 99,8 |



[^3]Therefore, to sum up, we find that the striking facts connected with public finance in the history of the century lying between the two great wars were these: A revision of the tariff and revenue laws to promote freedom of trade and to provide the means for great social reforms, a failure to bring about a radical reduction in the debt and a steady increase in military expenses, even during a prolonged period of an almost complete absence of war.

## Debt-Refunding

Since 1817 several refunding operations have been carried through. The most important of these operations, and the only one to result in a saving commensurate with the effort, was that made by Mr. Goschen in 1888 and 1889 when some $£_{565}$ million three per cents of various issues were refunded into $23 / 4$ per cent. consols at a saving of $£ 1,411,000$ a year. In accordance with the terms of issue the interest rate on these consols became $21 / 2$ per cent. after 1903 . These are the consols of today. Mr. Gladstone had previously endeavored, in 1853, to effect a somewhat similar operation but the conditions at the time were unfavorable to the success of the undertaking. An operation undertaken in 1884 was likewise unsatisfactory in its final outcome, as it resulted in a saving of only $£_{46,756}$ a year on some $£ 22,362,000$.

## Some Comparisons

On January 5, 1817, the debt stood at $£ 850$ million. The fixed charge for interest and management at that time was about $£_{32}$ million. In this amount was included the sum of about $£_{2}$ million annuity payments. It has for many years been customary for Treasury officials in making statements
of the debt to capitalize the annuity payments. This hardly seems a proper method for 1817 as the annuities being paid at that period were really bonuses, or additional interest, and represented no expenditure of capital. However, if to agree with the Exchequer method of today we roughly calculate the capital value of the annuities outstanding in 1817 at fifteen years purchase, or, say, $\mathcal{X}_{30}$ million, this would bring up the par value of the debt in 1817 to $£ 880$ million, equivalent to about $\boldsymbol{X}_{52}$ per head of population.

In 1817 the national wealth was estimated to be $\mathbf{£ 2 , 7 0 0}^{2}$ million, about $\AA_{1} 59$ per capita. Therefore the national debt at that time was almost one third of the national wealth. In 1914 the national wealth was estimated at £ $_{14,500}$ million, say, $£_{3} 15$ per capita. The debt, which was then $£_{711}$ million, was thus less than 5 per cent. of the wealth. The fixed charge at the earlier date was 8 per cent of the estimated national income of $£_{400}$ million, while at the latter date it was only a trifle over one per cent. of the estimated national income of $£ \mathbf{2 , 2 5 0}$ million. Therefore the growth in population, in wealth and in earning power had made the burdensome debt of 1817 a very unimportant affair by 1914.

Again, the expenditures of the Government for all purposes amounted in 1817 to $£ 71$ million, about 18 per cent. of the national income; in 1914 the expenditures of the Government had risen to $£_{212}$ million but this amount was not quite $91 / 2$ per cent. of the estimated national income.

Casting these figures into tabular form we arrive at the following statement. It should be borne in mind that national income is the estimated income of the British people as a whole, not the revenue of the Exchequer. This latter would be substantially the same as the Government expenditure.

THE FISCAL CHANGES OF A CENTURY
Grand Totals, Expressed in Millions
Italics indicate decreases

| Date | Popl. | Natl. Wealth | Debt | Debt Charge | Natl. Income | Gov't <br> Expend. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1817 | 17 | 2,700 | 850 | 32 | 400 | 71 |
| Aug. 1914 | 46 | 14,500 | 711 | 24 | 2,250 | 212 |
| Changes | 29 | 11,800 | 139 | 8 | 1,850 | 14I |

Stated ${ }^{\circ}$ Per Capita and Percentage

| Date | Natl. <br> Wealth | Debt |  | Natl. Income | Debt Charges |  | Gov't <br> Expenditure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Per Cap. | Per Cap. | $\%$ Wealth | Per <br> Cap. | $\begin{gathered} \text { Per } \\ \text { Cap. } \end{gathered}$ | $\begin{gathered} \% \\ \text { Income } \end{gathered}$ | Per Cap. | $\begin{gathered} \% \\ \text { Nat'l } \\ \text { Income } \end{gathered}$ |
| Jan. 1817 | $\begin{gathered} £ \\ 159 \end{gathered}$ | £ | 31.5 | $\begin{array}{lll}\text { f } & \text { s } \\ 23 & \text { II }\end{array}$ |  | 8.0 | $\begin{array}{ll}\text { E s } \\ 4 & 4 \\ 4 & \end{array}$ | 18.0 |
| Aug. 1914 | 315 | 15 | 4.9 | 49 - | 010 | 10.6 |  | 9.4 |
| Changes | 156 | 35 | 26.6 | 259 | 17 | 2.6 | 3 | 8.6 |

In words of Sir Stafford H. Northcote, writing in 1862, the great advance of the British nation from 1817 to 1914 may be summed up as due "to the progress of science, and its application to all the arts of life, the development of the railway system, the improvements in agriculture and manufactures, the discoveries of gold and the impulse given to colonization." To these general causes he added the great improvement
which had taken place in the fiscal administration. Since the cime when he wrote has come the age of electricity with the wonderful impulse which it has given to the arts and sciences, especially as applied to the material well-being of the nation; the tremendous advance in transportation methods, on land and sea and now in the air; the intensive methods of production; improvements in finance and, as an impressive result of the recent war, the welding together of the constituent political units of which the Empire is composed into a unifed whole, one nation in sentiment and purpose composed of many separate political units.

The history of public finance in England during the crucial period of the World War has already been related.

## Chapter XXIII

## The Ancient Ex́chequer

T${ }^{\top}$ HERE is every evidence that the early kings had in use well developed methods of administering their finances.

## The Exchequer

The Exchequer was the place where the King's revenue was received, where it was kept, supervised and controlled and from whence it was issued. There were three officers of the Exchequer, each of whom had control over the issue of the money. The money was kept in chests, each chest having three locks and each of these officers having his key to one of the locks. One of these officers called the Teller, was the cashier who received the money; then there was the Clerk of the Pells, who recorded on a pell or parchment all receipts and issues; finally there was the Auditor, who examined the records and whose duty it was to see that no money was issued except in accordance with the law, and with the sanction of Parliament.

This system existed until well into the nineteenth century, although certain changes were of course made in respect to the actual custody of the cash. In 1834 the whole system for the administration of the public finances was revised and modernized.

## The Accounting

The King's revenues were collected by the sheriffs and by them were twice a year, at Easter and at Michaelmas (the day after the feast of St. Michaels, about the end of September) paid to the King's treasury. 150]

On the appointed day the sheriffs would bring their accounts and the money which they had collected to the hall in which the settlements were to be made, known as the Receipt of the Exchequer. Upon entering the hall the Sheriff would see at the farther end a table, about ten feet in length and five in breadth, covered with a black cloth which was divided by white lines into squares about a handbreadth in width. It was this chequered cloth which gave name at once to the system of accounting and to the place of meeting and which persists to this day as the designation of the English treasury.

Seated on a bench to the right of the table clothed in their scarlet robes, the Sheriff would see the Bishop, the Justiciar who represented the King, and the Chancellor of the Exchequer; also the Constable and several Chamberlains or courtiers. Seated at the far side of the table were the Treasurer and the scribes or clerks. Facing them were the calculator and the cutter of tallies. Seated on benches arranged around the room were the taxpayers, watching to see that the accounts as they affected their interests were correctly stated. The Sheriff upon approaching the table would place on it his receipt tallies and the silver coins for use in settling his account. He would then take his place at the foot of the table facing the Chancellor and other dignitaries. The game of chess which was to decide his indebtedness then proceeded.

In the early days only the priests and monks were able to read and write; therefore the accounting had to be visualized. To serve as counters foreign coins were used. The calculator would place the coins in the proper spaces on the chequered cloth to represent the Sheriff's indebtedness. Below he would place the silver paid in by the Sherif and countern representing any credits due him. Thus was visualized the state of
the account, and the adjustments required to effect a settlement could be readily determined. The Chancellor's scribes meanwhile had entered a statement of the account in duplicate on the rolls of vellum which were used in place of the paper account books of to-day. A tally-receipt-prepared by the tally cutter would be given to the Sheriff to be carefully preserved until the next settlement.

## Tallies

These tallies were sticks of some hard wood on one side of which notches were cut of peculiar shapes and sizes corresponding to the figures of account which they represented. The stick was bored near one end so that it could be filed upon a rod. When the sums paid had been cut on the two edges of the stick, and the name had been recorded, it was split nearly to the bottom, so that one part contained a stump or handle while the other was only a flat strip. The larger part or tally was retained by the Sheriff, while the smaller part remained in the Treasury. This was known as the counter-tally or counter-foil. As it was customary for the Sheriff to make only a partial settlement at Easter, it was necessary for him to bring with him at Michaelmas his Easter tallies in order that he might obtain the necessary credits in making his settlement for the year. The validity of the tallies presented could be determined by comparing them with the counterfoil. The use of tallies at the Exchequer was not finally discontinued until 1834. On the 10th of October of that year we read in the Gentleman's Magazine that the most ancient revenue department in the State, the Receipt of the Exchequer, terminated; also that on the 16 th the tallies were burned, and on the same day the houses of Parliament were destroyed by fire. The presumption was that the flues were
overheated on account of the great fire caused by the burning tallies.

The use of tallies has left a permanent imprint upon English language and usages. The larger part of the tally was sometimes called the stock and the smaller part the foil. Down to about a hundred years ago, if one lent money to the Bank of England or to the Exchequer, tallies were cut for the amount; the bank kept the foil and the creditor received the stock. He thus held "bank stock" or "Exchequer stock" of the amount recorded upon the tally. When the form of cheque was adopted it is true that it was not called 2 foil, but the part retained by the payer was called the counter-foil and the word "cheque" itself goes back ultimately to the same root as "Exchequer."

## The Ancient Treasury

The taxes in the early days were frequently paid in kind, $a s$ well as in money. The wealth of the King and of his nobles, not in the form of landed property, forests, flocks, herds and the like was represented not alone by money but by gold and silver plate, by jewels and gems and by richly embroidered robes. Such articles belonging to the King were kept in his Treasury. For a long time, wherever the King went the Treasury also went. The principal treasuries ultimately came to be located at Winchester and at Westminster and finally with the growing importance of London the Treasury was definitely located there.

It would be interesting to consider here the methods of administering the Treasury in the early days and the duties of the officials. However, it is impossible to do this in the space at our disposal. Therefore we will proceed at once to an examination of the system now in use.

## Chapter XXIV

## The Modern Fiscal System

THE finances of Great Britain are conducted on what is known as the budgetary plan. Briefly stated, this plan involves the preparation by the executive of a "definite plan or proposal for financing the business of a future period both with respect to revenues and expenditures."

## The Budget

The policy of the English budget is settled by the Chancellor of the Exchequer and the details worked out by the permanent staff of the Treasury. The budget is presented by the Chancellor to the Commons usually in April or May. Sometimes a supplementary budget is presented in the Autumn. Previous to the presentation of the budget a financial statement containing carefully prepared estimates of revenue and expenditure is placed in the hands of each member of Parliament. These estimates are compared with the actual expenditure for the past year, also with the estimates for that year. At the time of presentation the Chancellor explains,-usually in great detail-the reasons for the proposed expenditures and especially for the proposed methods of taxation or borrowing to be followed in obtaining the revenues necessary with which to meet the expenditures. Many of the budget speeches have been notable for their lucidity and interest. Gladstone's budget speeches were among his greatest efforts. Parliament can approve or reject the recommendations of the budget but does not add to its $154]$
items or make an appropriation in excess of the amount proposed.

Certain appropriations are of a continuing or permanent character, such as those for the support of the King and his household; the interest and management of the public debt; the salaries for the higher judicial officers and the regular annual expense of the military establishment. These are designated as "Consolidated Fund Services." Annual appropriations for the other public expenses are known as the "Supply Services." Appropriations for such services cannot be made "unless recommended from the Crown." That is, unless set forth in the budget. This puts an effective check on log-rolling and trading and upon ill-considered expenditures. So carefully are the estimates of expenditures and receipts made that in normal times the actual results vary but :lightly therefrom.

## The Exchequer-i.e. The Public Treasury

The Treasury Department controls all financial operations the Government which in any manner affect the amount funds that Parliament will be called upon to vote for their sport or the expenditure of funds when granted. Though med a department the Treasury is technically a board. or to 1714 the head of the department was known as the d High Treasurer. In that year the office was put in umission; that is, while the office remained a single one vision was made that its duties should be performed by a -d consisting of a First Lord of the Treasury and three ior Lords. Though this board has continued in existence 1 the present time all real authority has in fact sed from its hands into those of the Chancellor of the iequer.

The position of the First Lord of the Treasury is usually held by the Prime Minister, but whether this is so or not this officer does not concern himself with the actual management of the affairs of the department of which he is nominally the chief officer. The three Junior Lords have certain minor duties in connection with the Treasury, but their real duties consist in acting as assistants to the Parliamentary Secretary of the Treasury, who is often designated as the chief whip of the Government in the House of Commons. Thus the officers nominally in charge of the Treasury in fact pay little or no attention to the direction of the affairs of that department, but concern themselves almost entirely with parliamentary matters.

## The Chancellor of the Exchequer and His Aids

The real responsible head of the Treasury is the Chancellor of the Exchequer. He is assisted on the parliamentary side by a parliamentary or patronage secretary and by th, three Junior Lords of the Treasury. On the administrativ side, he has as his chief assistants two officers, one known : Permanent Secretary to the Treasury and the other as Pe manent Financial Secretary. These officers do not lea: office when a change in administration takes place. T former performs the duties of administrative head of $t$ department; the latter has immediate charge of the dut of the department relating to the exercise of its powers, financial control over the other services. To enable him perform his duties the Financial Secretary has a large s: of clerks.

The Treasury consists of seven divisions with a princi clerk at the head. Among these divisions is distributed
work of all the departments of State. For instance, one has the Army, the Navy and the Colonial office; another, the legal departments and the Home Office; and so on. All the departments of State have their work distributed to a division of the Treasury and every paper relating to 2 department goes to the division which has to deal with that department of State. Therefore these principal clerks at the head of the seven divisions are the people who consider the general questions of expenditure, economy, and efficiency in the departments of State which relate to their division. They are the real people who all through the year and changes of administration are considering all the topics that fall to the work of their respective divisions.

## The Consolidated Fund

In 1787 Parliament provided that there would be one general fund into which all the revenues of the Crown should be put and from which all disbursements should be made. Prior to this time it had been customary to allocate certain (definite charges against each of the principal sources of revenue. It is stated that in 1785 there were no fewer than ${ }^{4} 74$ charges involving 74 separate accounts imposed upon the er customs revenue, while the militia charges were defrayed from
' the land tax and certain hereditary annuities were met out e. of the post office revenues. To correct this situation the ; "Consolidated Fund Act" was passed. A similar act was passed in 1816 in reference to revenues and expenditures of futreland and the two consolidated funds were further consoliIniated into one convolidated fund for Great Britain and raseland. The Consolidated Fund stands to the credit of the 'Exchequer, that is, of the public treasury.

## The Bank of England and the Treasury

The custodians of this account are the Bank of England and the Bank of Ireland. Thus these banks are substituted for the "strong box," or chest, of the old Exchequer for the keeping of the public treasure. The duty of the banks is confined to receiving the public revenue and paying it out to officers who are charged with the actual responsibility of settling and paying public obligations. These officers take the place of the Teller under the old cashbox system.

The centralization of all public payments in London and the direct hold of the Bank on the process of payment lend an importance to the central organization of public financial administration in England such as it possesses in no other country. Through the medium of the Bank public revenues, without being collected in provincial treasuries, are transmitted direct by the Receivers of Taxes to London, after local expenses have been met. The Bank of England thus actually receives the surplus cash of all the revenue departments. The greater part of the Government expenditures is paid in London itself. Expenditures which have to be met outside of London and which cannot be paid by the receivers from their collections are always remitted from London. This keeps the management of the money in the hands of the central authorities.

Each of the head offices concerned with the administration of the various branches of the revenue has an account at the Bank. All the money received by these offices is in the first instance credited to one of these accounts. Only miscellaneous receipts which are managed by the Treasury are paid direct to the Exchequer account.

Revenues received by the collectors in the provinces are
remitted to London by means of bills of exchange which are made out to the head office to which payment is to be made. Should there be a branch of the Bank of England in the neighborhood of the collector he deposits his money there, and the amount is at once credited to the general account of the Commissioners of Inland Revenue in the books of the Bank, but as the Bank has only teight branches remittances are more usual. The bills run for two or three days and are sent to the Bank by the Commissioners of Inland Revenue to be cashed. When they have been honored the Bank credits the account of the office with the amount in question.

The Bank of Ireland acts for account of the Exchequer in Ireland while in Scotland the six principal banks act in turn in this capacity, as agent for the Bank of England.

The Government account has been kept by the Bank of England since 1834 under the name of "The Account of His Majesty's Exchequer." Into this account all the public revenues are paid as soon as possible after their collection and from it all disbursements are made. The Exchequer account is not the account of a distinct central treasury as opposed to various other treasuries. It is the repository for all public moneyz.

## The Paymaster General

The English system of disbursing public funds rests upon the principle of having a single Paymaster General for the whole Government. He receives the money from the Exchequer that is required for the payment of public obligations and makes such payments himself or advances money to "sub-accountants" for that purpose. "Sub-accountants" are defined by the Exchequer and Audit Departments Act as

[^4]"those who receive advances by way of imprests from principal accountants or who receive fees or other public moneys through other channels." The Paymaster General is in no sense an accounting officer. He has nothing to do with the examination and settlement of claims. His sole function is that of making payment of orders drawn upon him by accounting officers proper. His responsibility is limited to that of satisfying himself that the orders for payment are in due form and are supported by the proper documents as required by law.

Originally there were a number of paymasters, one for the army, one for the navy and a number for the several civil services. During the years $1830-1856$ these were abolished and their duties consolidated in the single office of Paymaster General. A special feature of this system is that although the Paymaster General keeps a separate account in respect to each vote for the civil services and a separate consolidated account with each of the departments of the army and navy, he keeps but one general balance from which he makes payments on account of all the votes. This means that so long as he has a sufficient balance he can pay any order drawn upon him regardless of the vote to which it relates whether he has requisitioned sufficient funds on account of that vote or not. Any payment on account of a vote in excess of a sum requisitioned for that vote is subsequently adjusted by a future requisition.

## Accounting Officers

As we have seen, the duty of the Paymaster General is that of paying obligations found to be due. It is for the accounting officers to determine what payments are so due and payable. Technically an accounting officer is the officer
charged with the duty and responsibility for the expenditure of a vote and of rendering an account of the manner in which the duty is performed.

An accounting officer is designated for each vote. Theoretically there might be as many accounting officers as there are votes. The same person is usually made the accounting officer for all the votes for a department or other important branch of the public service. The duty of rendering an account of the manner in which funds are expended is a part only of the duties of this officer. He is also charged with the supervision and control of all the financial operations of the department to which he is attached. He is the officer whose approval is required before any expenditure of funds can be made or liability entered inta. The accounting officer has entire charge of the financial operations of his service. He is responsible for all expenditures and the rendition of the accounts. His duties pertain not only to the settling of accounts but to the incurring of obligations in the first instance. He has the duty of seeing not only that the law is strictly complied with but that all expenditures are made to the best possible advantage. In 2 word he is the watch dog of his service and the permanent financial secretary of his department.

There is a complete and thorough system of audit.

## Financial Reports

Various financial reports are submitted annually to Parliament. The principal report, known as Finance Accounss, dates from 1802 and has not changed its essential character since its first issue. The accounts are made up for the fiscal

## year which terminates on March 31 and are laid before Parliament on or before June 3oth of each year. Finance Accounts also contains a statement in considerable detail in regard to the national debt.

Norr-The principal dependence for the statements made in this chapter has been placed upon a report on The System of Financial Administration of Great Britain, made in 1017 to the Institute for Government Research, by Professors William F. Willoughby, Westel W. Willoughby and Samuel McCune Lindsay, and upon the History of the Bank of England and ils Financial Services to the State, by Eugene Von Philippovich.

The word "vote" which frequently occurs in the chapter is used in a sense equivalent to our term "appropriation." while the word "issue" is equivalent in our usage to "pay."

## Chapter XXV

## Concluding Thought and Deductions

WE have now traced the history of English public finance from the time of the accession of William III down to the present day. We have found that with relatively unimportant exceptions the debt has arisen from the extraordinary expenses of the various wars in which the nation has been engaged. We have seen that the cost of war has progressively increased and that after each war all expenses of the State have risen to a new level. We have found little disposition to reduce debt during the intervals of peace. However, we have found that the growth of the nation in material resources has reduced in each historical period the burden of the debt.

We have learned that the English financiers have always derived a substantial portion of the cort of each war period from taxation. Turning to the revenue from taxation, we discover that the most fexible source of taxation has proved to be the income tax. The finance ministers since that form of taxation was introduced, have found it comparatively easy to meet the requirements of a new situation by slightly or largely raising or lowering the rate of this tax. It is no longer necessary to hunt up fantastic sources of income, such as taxation of bachelors, hearth taxes, window taxes and the like. Again, so far as the customs are concerned, it has been learned that much better resules can be obtained from $\mathbf{a}$ moderate tax on a few articles of common use than by taxing many articles. This simplifes administration and reduces the cost of collecting the taxes.

## RECEIPTS OF EXCHEQUER (1688-1920)

 For Closing Years of Historical Periods, also a Comparison of 21/4 Centuries [1688 to 1914] with 6 Years of World War [1915 to 1920]| Distinctive Note Preceding Period | Fiscal Year End. | Cuetoms | Excise | Estate | $\|\dot{S t a m p s}\|$ | Land and House | Property and Income | $\begin{aligned} & \text { Pos- } \\ & \text { tal } \end{aligned}$ | Sundry | Total Revenue | Bor-rowing | Total Receipts | Cash <br> Be- <br> gin- <br> ning <br> of <br> Year | Total to be Accounted For |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Last Year James II | 1688 | 1,0 | 0,7 |  |  |  |  |  | 0,4 | 2,1 | 0,2 | 2,3 |  |  |
| Wars, William III | 1697 | 0,7 | I, 0 |  |  | I, |  |  | 0,6 | 3.3 | 4. I | 7.4 | 0,8 | 8,2 |
| Peace. - | 1701 | 1,6 | 5, 0 |  |  | I, 0 |  |  | 0,2 | 3.8 |  | 3,8 | 0.3 | 418 |
| Wars, Anne | 1714 | 1,6 | 2,0 |  |  | I, 3 |  |  | 0,4 | 5.3 | 1,0 | 6,3 | 0,9 | 7.2 |
| Peace. ${ }^{\text {a }}$ - | 1739 | 1,4 | 3.0 |  |  | I, 1 |  |  | 0,3 | 5,8 |  | 5,8 | 1,2 | 7.0 |
| War-Aust. Suce. | 1749 | 1,6 | 3,4 |  |  | 2,2 |  |  | 0,3 | 7,5 | 5.0 | 12,5 | 1,7 | 14.2 |
| Peace. | 1755 | x,8 | 3.7 |  |  | 12 |  |  | 0.7 | 7.0 | 0.4 | 7.4 | 1,2 | 8,6 |
| War-Seven Years'. | 1766 | 2.5 | 4.9 |  |  | 2,2 |  |  | 0.7 | 10,3 | 0,4 | 10,7 | 2. | 13, 1 |
| Peace. . . | 1775 | 2,8 | 5.1 |  | 0,3 | 1.8 |  | 0,2 | 0.9 | 11,1 |  | 1 1,1 | 2,6 | 13.7 |
| War-American | 1785 | 4.5 | 6, 1 |  | 1,2 | 2,7 |  | 0,3 | 0,7 | 15.5 | 11,0 | 26,5 | 4,3 | 30,8 |
| Peace. | 1792 | 4.5 | 8,7 |  | I,5 | 3.0 |  | 0,4 | 0,9 | 18,6 |  | 18,6 | 4,3 | 22,9 |
| War-Gt. French | 1802 | 9.9 | 12,7 |  | 3,2 | 4.6 | 5,8 | 1,2 | 1,7 | 39,1 | 26,7 | 65,8. | 8,9 | 74,7 |
| " 2d Period | 1817 | 17,9 | 27,0 |  | 6,8 | 7.3 | [1,8 | 2,2 | 2,3 | 69,3 |  | 69,3 | 15.7 | 85.0 |
| Peace-rst Ref. Act. | 1833 | 28,5 | 17,9 |  | 7,2 | 5.2 |  | 2,2 | 0,2 | 51,2 | 0,3 | 51,5 | 3.8 | 55.3 |
| Whig Government . | 1842 | 23,5 | 14.8 |  | 7,3 | 4.7 |  | 1,4 | 0.5 | 52.2 | 1,9 | 54, | 3.9 | 58.9 |
| Peel's Ministry | 1847 | 22,2 | I5,0 |  | 7.7 | 4.5 | 5.5 | 2,0 | L,4 | 58,3 |  | 58,3 | 8.5 | 66,8 |
| Tarif Reform . | 1854 | 22,5 | 16,3 |  | 7,1 | 3.3 | 5,7 | 2,5 | $\underline{1} 7$ | 59,r |  | 59,1 | 8,8 | 67,9 |
| War-Crimean | 1857 | 23,5 | 18,3 |  | 7,4 | 3, r | 16, I | 2,9 | 1,6 | 72,9 | 6,3 | 79,2 | 5,6 | 84,8 |
| Peace-2d Ref. Act. | 1887 | 23.3 | 20,7 |  | 9.4 | 3.5 | 5,7 | 4.5 |  |  |  | 69,4 | 5.9 | 75.3 |
| Gladstone's 1at Min. | 1874 | 20,3 | 27.1 |  | 10,5 | 2.3 | 5.6 | 6,9 | 4, r | 76,8 |  | 76,8 | 11,9 | 88.7 |
| Disraeli's, 2d Min. | 1880 | 19,3 | 25.3 |  | 11,3 | 2,6 | 9,2 | 7.7 | 5.6 | 81,0 | 2,4 | 83.4 | 6.9 | 90,3 |
| Gladstone's 2d Ad. | 1886 | 19,8 | 25.4 |  | II,5 | 2.8 | 15.1 | 9.8 | 4.6 | 89,0 | 4.3 | 93,3 | 5,0 | 98,3 |
| Home Rule Diss. . | 1895 | 20.1 | 26,0 | 8.7 | 5.7 | 2.4 | 15.6 | ${ }^{13,2}$ | 2,6 | 94.3 | 0,3 | 94,6 | 6.0 | 100,6 |
| War-Boer | 1903 | 34.6 | 37,4 | 18,0 | 8,2 | 2,5 | 38,8 | 18,3 | 3,2 | 161,0 | 37,8 | 198,8 | 8,6 | 207,4 |
| 226 Years 1688 to | 1914 | 2596,8 | 3186, | 845,7 | 958,1 | 701, 3 | 1225,7 | 791,4 | 342,4 | 10108,2 | 860,9 | 10954, 1 | 0,1 | 10954,2 |
| Year Before the War | 1914 | 35.5 | 39,6 | 27,4 | 10,0 | 3.4 | 47,2 | 30,8 | 4,4 | 198,3 | 7,3 | 205,6 | 6,3 | 211.9 |
| Year After the War | 1920 | 149.0 | 133.0 | 41,0 | 23,0 | 10.0 | 649,0 | 44,0 |  |  | 723,0 | 11262,0 | 12,8 | $\begin{array}{r} 2675.8 \\ 112774 \end{array}$ |
| 6 Years' World War | 1920 | 493,0 | 391,0 | 193,0 | 65,0 | 19,0 | 2227,0 | 217,9 | (66,0 | 4072,0 | 7196,1 | 11267,0 | 10,4 | $11277,4$ |

tIncluding death dutieg. SSept. 29, through 1792; Jan. 5, through 2854; March 3 I thereafter.

As to the purposes for which national taxes are raised, we find that outside of the cost of wars, the maintenance of the military establishment in times of peace and the public debr burden, other expenses are relatively small. Therefore, if a way could be discovered to end wars and to pay off the debt, the people of Great Britain thereafter need scarcely feel the burden of taxation for other purposes, that is, unless it seemed wise to undertake enlarged plans for social betterment. As to such undertakings, we have found that since the widening of the suffrage there has been a growing tendency toward social betterment through State co-operation, and that when the war broke over the world in 1914 there were then pending plans which would have involved further heavy expenditures for such purposes, and that notwithstanding the heavy financial burdens of the war there has been during the war period an increasing expenditure for education, for old age pensions, and for similar purposes.

From the point of view of the investor, especially of the foreign investor, we find that aince the Revolution of $\mathrm{IC88}$ England has scrupulously kept her engagements with the public creditor, that she has done so in times of atress and that her burdens to-day, while heavy, are not much heavier, in proportion to national wealth and income, than those which she has borne 28 times in the past. Recent statistics of her commerce show that the country, even in the unsettled year 1919, has quietly been forging ahead again. While we expect to vie with her in a generous rivalry for business, we cannot but be cognizant of the fact that her long experience in the shipping trade, extending over the centuries from the time of Drake's famous voyages in the days of Queen Elizabeth, give her a peculiar advantage in this line. The experience of her bankers and manufacturers is an asset of incalculable value.

> EXPENDITURES OF THE EXCHEQUER (1688-1920)

For Closing Years of Historical Periods, also a Comparison of 21/4 Centuries [1688-1914] with 6 Years of World War [1915-1920]

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Distinctive Note Preceding Period} \& Fiscal \& \multirow[t]{3}{*}{Civil Gov-ernment} \& \multirow{3}{*}{\[
\begin{aligned}
\& \text { Mili- } \\
\& \text { tary }
\end{aligned}
\]} \& \multirow{3}{*}{Debt Charge} \& \multirow[b]{3}{*}{Total Expenditures} \& \multirow[t]{3}{*}{\[
\left|\begin{array}{c}
\text { Debt } \\
\text { Pay- } \\
\text { ments } \\
\text { Net }
\end{array}\right|
\]} \& \multirow[b]{3}{*}{Total Payments} \& \multirow[t]{3}{*}{\begin{tabular}{l}
Cash \\
End \\
of \\
Year
\end{tabular}} \& \multirow[t]{3}{*}{\[
\left|\begin{array}{c}
\text { Total } \\
\text { Ac- } \\
\text { counted } \\
\text { for }
\end{array}\right|
\]} \& \multicolumn{3}{|r|}{Public Dert} \\
\hline \& \begin{tabular}{l}
Year \\
Ended
\end{tabular} \& \& \& \& \& \& \& \& \& \& Per \& Capita \\
\hline \& Sept. 29 \& \& \& \& \& \& \& \& \& Actual \& \[
\begin{gathered}
\overline{\text { Debt }} \\
\boldsymbol{\Sigma}
\end{gathered}
\] \& \[
\mathrm{Charge}_{\mathrm{E}}
\] \\
\hline Last Year James II. \& 1688 \& 0,6 \& 1,0 \& ,2 \& 8 \& ,2 \& 0 \& \& \& 1,0 \& 4 \& \\
\hline Wars, William III. \& 1697 \& 0,9 \& 6,0 \& r, \({ }^{2}\) \& 7.9 \& , \& 7.9 \& 3 \& 8,2 \& 18,4 \& \& \(\because \quad 3\) \\
\hline Peace \({ }^{\text {a }}\) \& 1701 \& 0.7 \& 1,5 \& I,2 \& 3,4 \& 0,2 \& 3,6 \& 5 \& 4,1 \& 15,3 \& 30 \& 5 \\
\hline Wars, Anne \& 1714 \& 1,2 \& 2,0 \& 3.0 \& 6,2 \& \& 6,2 \& I, \& 7, \& 48,7 \& \& 12 \\
\hline Peace. Times of Walpole. \& 1739 \& 1,0 \& 2,2 \& 2,0 \& 5,2 \& 0,7 \& 5.9 \& I, I \& 7.0 \& 48.3 \& 86 \& \begin{tabular}{l}
\(\square\) \\
\hline \\
\hline 12
\end{tabular} \\
\hline War, Austrian Succession. \& 1749 \& I, \(\mathbf{1}\) \& 8,5 \& 3.0 \& 12,6 \& \& [2,6 \& r, 6 \& 14.2 \& 79.9 \& 136 \& 10 \\
\hline Ware Seven \& 1755 \& 1,0 \& 3.4 \& 2,7 \& 7,I \& \& 7,1 \& 1,5 \& 8,6 \& 75,4 \& 12 \& .. 7 \\
\hline Peace. \& 17775 \& 1,0 \& 4,6 \& 4,7 \& 10.3 \& \& 10,3 \& 2,8 \& r3,1 \& 133,1 \& 19 \& 14 \\
\hline War, American \& 1775

7885 \& 1,8 \& $\begin{array}{r}3,9 \\ \hline 14,8\end{array}$ \& 4,7
9,2 \& 10,4
25.8 \& 0,9 \& 11,3
258 \& 2.4 \& 13,7
308 \& 127,9 \& 17 \& 12 <br>
\hline Peace \& 1792 \& 2,0 \& $\begin{array}{r}5,6 \\ \hline\end{array}$ \& 9,2
9,3 \& 16,9 \& 1,8 \& 25,8
$\mathbf{2 8 , 7}$ \& 4,2 \& 30,8
$\mathbf{2 2 , 9}$ \& 244,2
238,0 \& $\begin{array}{rrr}29 & 15 \\ 27 & 7\end{array}$ \& $\begin{array}{ll}1 & 3 \\ 1 & 1\end{array}$ <br>
\hline War, Great French \&  \& 7.9 \& 37.6 \& 19,9 \& 65.4 \& \& 65.4 \& 4,2 \& 22,9 \& 504,2 \& $\begin{array}{cc}27 & 7 \\ 45 & 17\end{array}$ \& $\begin{array}{rr}1 \\ \text { 1 } & 12\end{array}$ <br>
\hline 2d Period \& 1817 \& 10,3 \& 28,1 \& 32,9 \& 71,3 \& 0,2 \& 71.5 \& 13.5 \& 85.0 \& 850,0 \& 50 \& $\begin{array}{ll}1 & 12 \\ 1 & 17\end{array}$ <br>
\hline Peace, Ist Reform \& 1833 \& 8,5 \& 13,8 \& 28.3 \& 50,6 \& \& 50,6 \& 4.7 \& 55.3 \& 789.5 \& 32 19 \& 13 <br>
\hline Peel's Ministry \& 1842 \& 9,4 \& 15,2 \& 29,7 \& 54,3 \& \& 54.3 \& 3.7 \& 58,0 \& 840,8 \& 319 \& 1 2 <br>
\hline Tariff Reform. \& 1854 \& 10.3 \& 16 \& 28,3 \& 55.5 \& 2,2 \& 57.7 \& 9,1 \& 66,8 \& 826,1 \& 3012 \& 1 I <br>
\hline \& Mar. $3 \mathbf{7}$ \& \& \& \& 53 \& 7,6 \& 03,4 \& 4.5 \& 67.9 \& 803,6 \& 29 \& I <br>
\hline War, Crimean \& 1857 \& 13,7 \& 34,2 \& 28,8 \& 76,1 \& \& 76,1 \& 8,7 \& 84.8 \& 836,8 \& 29 IS \& 10 <br>
\hline Peace, 2d Reform Act . \& 1867 \& 15,3 \& 25.8 \& 26, 5 \& 67.2 \& 0,8 \& 68,0 \& 7,3 \& 75,3 \& 800.9 \& 2610 \& $0 \quad 17$ <br>
\hline Gladstone's 1st Ministry \& 1874 \& 25.1 \& 24,6 \& 26.7 \& 76,4 \& 4,9 \& 81,3 \& 7.4 \& 88,7 \& 771.2 \& 24 \& 0 I <br>
\hline Gladstone's, 2d Ministry \& 1886 \& 29.7 \& 26,0 \& 28,7 \& 84 \& 2,7 \& 87,1 \& 3.2 \& 90,3 \& 770,6 \& 22 \& 0.16 <br>
\hline Home Rule Discussions \& 1895 \& 33,9 \& 26,4 \& 23,7 \& 92,7 \& \& 92.7 \& 5.6 \& 98,3 \& 742,0 \& 209 \& - 13 <br>
\hline War, Boer \& 1903 \& 73.8 \& 35,3
100,5 \& 25,0
27,2 \& 200,8 \& I \& 94,3
200,8 \& 0 \& 100,6 \& 659.0 \& 1613 \& - 13 <br>
\hline 226 Years 1688 to \& 1914 \& 2,873,2 \& 4,524,0 \& 8,647,3 \& 10,944,0 \& \& 10,944,5 \& \& 10,954,9 \& 798,3 \& 194 \& 13 <br>
\hline Year Before the War \& 1914 \& 99,8 \& 77,2 \& 24,5 \& 201,5 \& \& 201,5 \& 10,4 \& $2 \mathrm{tr}, 9$ \& 707.6 \& 157 \& 010 <br>
\hline Siz Years' World W \& 1920 \& 188,0
710,0 \& $1,146,0$
$9,657,5$ \& 1,001,0 \& $1,666,0$
$1,268,0$ \& \& 1,666,0 \& 9.4 \& 1,675.4 \& 8,078,7 \& 175 \& 716 <br>
\hline
\end{tabular}

*For Actual Charge see Column 4, "Debt Charge."
Peace, 2 d Reform Act .
Gladstone's 18t Ministry
Gladstone's, 2d Ministry Home Rule Discussions War, Boer
26 Yeare 1688 to
Year nfter the War

Her loyal overseas citizens, the peoples of her self-governing Dominions, Crown Colonies and Dependencies are a bulwark of atrength and afford a wonderful home market, which it will be surprising not to see specially developed hereafter.

What England requires to-day to insure her material well being is a heavy output of goods and services which the world will take in exchange for the food which she must buy in order to maintain her population and for the raw materials of manufacture, most of which she must seek without her own borders.

If class distinctions are forgotten in a general effort for the common welfare-in short, if the Golden Rule of doing as you would be done by is made the rule of action for conservatives and liberals, for labor and for capital, there need be no fear but that England will maintain a strong and wholesome national life, that prosperity and happiness will be hers and that the wonderful credit standing which she has enjoyed for many generations will be maintained and strengthened in coming years.

The tables printed on pages 164 and 166 summarize the statistical data for the entire period from 1688 to 1920. They have been compiled with great care and will be found worthy of study.

## The Bank of England

## Chapter I

## A Banking Evolution

THE Bank of England is more than a corporation. It is a personality. The first of the modern banks, if a bank two and a quarter centuries old may be so called, it is also the most powerful. This standing does not come because of its resources, for even its large capital and surplus of £17,800,000 are exceeded or closely approached by those of several of the London joint-itock banks, which also have greater total resources. The Federal Reserve Banks of the United States have combined capitals and surpluses nearly double those of the Bank of England, and gold holdinge nearly five times as large. Nevertheless the Bank of England has a prestige and a standing which is all its own, won by years of honorable and capable administration of the finances of the world's greatest money capital.

## The Functions of the Bank

The Bank of England while privately owned performs all of the functions of a State bank. It also conducts a general banking business, receiving the deposit accounts of corporations and of individuals.

From 1844 until 1914 it possessed practically the sole right of note issue in England, but the Treasury, or currency,
notes now in circulation greatly exceed the combined circulation of the Bank of England and of the Scotch and Irish banks.

The functions of the Bank in connection with the Exchequer described in another chapter are of great importance.

The prerogative of the Bank, which has accrued to it by a process of evolution, of holding the ultimate reserve for the banking and commercial interests of the United Kingdom is, in normal times, what gives the Bank its premier position among English financial institutions. The other distinctive purpose which it serves, especially in times of national stress, is by the alchemy of credit to liquefy the assets of the Kingdom and put them to work for its preservation and advancement

## Holds Ultimate Banking Reserves of Nation

As to the first of these functions, that of holding the ultimate banking reserve of the Kingdom, it has come to be an axiom of the Englishman's financial creed that as the Government is back of the Bank it cannot fail. Therefore, it is argued, there is no reason why the other banks should carry any important reserve other than their deposit with the Bank, although some of the joint-stock banks in recent years have adopted the policy of carrying a substantial amount of gold in their own vaults. The amount so held in July, 1918, was estimated by the "Committee on Currency and Foreign Exchanges after the War," of which Lord Cunliffe was Chairman, at $£_{40,000,000 \text {. The Scotch and Irish banks, as ex- }}$ plained in the previous chapter, also carry cash balances which may include a certain amount of specie. Except as to the gold so held the banking business of Great Britain, with its world-wide ramifications, depends upon the strength of
the Bank and the wisdom of the management, and in consequence the commercial credits of the world also may be said to rest largely on the same foundation. At least such was the case until August 1, 1914. The raising of the Bank's rate usually would automatically turn the exchanges in favor of London. The lowering of the rate would make for "easy money" throughout the world. Not only so, but the volume of the business which could be done, even in remote parts of the world, was determined by the attitude of the Bank. This delicate credit structure with its world-wide relations is now partly dislocated as a result of the war and will not properly function again until England returns to a specie basis.

## Mobilizes National Credit Resources

The other special function served by the Bank is that of mobilizing the financial resources of the people for great financial and commercial emergencies and especially for meeting the needs of the Government in time of war. This is accomplished because of the fact that the ultimate banking reserve of the nation carried with the Bank can be made the basia, on occasion, for a great expansion of credit. It is the modern development of our forefathers" idea of a "fund of credit." The reserve of the joint-stock and private banks deposited with the Bank has come to be considered a basis for an extension of credits to their borrowing customers. As a result of long experience, it is found that a given reserve is sufficient to warrant the granting of credits for several cimes its amount. This principle is well known to bankers and constantly observed in their transactions.

## Chapter II

## The Genesis of Banking

IT will be of interest, before taking up the history of the Bank of England and discussing its functions more in detail, briefly to consider the evolutionary process which led up to conditions making this bank a possibility.

## Banking Originated in Italy

The enterprise of the medieval Italian merchants carried them to all parts of the known world. It was natural, therefore, that the Popes should commission them to collect their revenues and to transport them to Rome. As these revenues were paid in the moneys of the countries where collected, the merchants readily became money changers and early originated and used letters of credit and bills of exchange. It was in keeping with their other activities to act as collectors and farmers of the revenues of the sovereigns of the countries which they visited. As farmers of the revenues they would make advances to the King and reimburse themselves, with a profit, by collecting the customs or some other branch of the King's revenue, which was given to them in "ferme"that is, as security. From such advances against the revenues it was an easy step to making direct loans. Sometimes the repayment of these loans was guaranteed by the pledge of the Crown jewels, the royal wardrobe, or the very diadem itself. As the payment of interest ("usury") was forbidden by the Church, the merchants were rewarded for these advances in various indirect ways. Sometimes the King agreed to buy jewels or other wares. Sometimes he 172]
granted trading concessions, or used his influence in behalf of the merchants with other potentates. Sometimes he made the merchants a substantial cash present for the use of the money beyond the time originally agreed upon for its repayment.

The necessities for ready money by those taking part in the crusades gave the Italians special opportunities for making gain from conversions of properties of various kinds into liquid funds.

## The Italian Bankers and the Plantagenet Kings of England

The Plantagenet kings of England from the time of Henry II through the reign of Edward III-that is, over a period of more than two hundred years, from the middle of the twelfth century to well into the fourteenth century-were active patrons of the Italian merchant bankers. The archives of Old England contain copies of contracts between the Crown and the merchants dating from as far back as the reign of King John. Following is a translation from the Latin of such a contract, which must have been entered into during 1199, the first year of John's reign. It refers to the payment of a debt uncurred by Richard 1, presumably in connection with his crusade. Note in the last paragraph the promise of the King, "by way of thanks for your generous waiting * - your waiting shall not reem burdensome to you."
debenture of the reign of john
Joha, by the grace of God King, etc. . . . to his beloved friende Speren, Barageton and their aseociate merchante of Placentia (i e. Piscenza), greeting.

Know that we wish to pay to you two thousand marke and 125 marka, which, for love of the dear memory of King Richard.
our brother and in accordance with his own request you lent to William Andegavensis (i. e. of Anjou) and R. Bangorensis, bishops, and to Stephen Ridel, for carrying out the business of our dearest grandson, the illustrious King Otho, in the Senate of Rome. And therefore, by these presents, we bind ourselves to you for such an amount, promising that on the next Feast of St. Michael after our coronation, at our exchequer in England, we shall cause to be paid to you, or to your known envoy, upon his bringing and presenting these presents, 625 marks, and at the Easter next following 500 marks in the same place, and at the following Feast of St. Michael 500 marks at the same place and likewise 500 marks at the next following Easter we shall cause to be paid at our exchequer in England to you or to your known envoy upon presentation of this our note of indebtedness. And nevertheless by way of thanks for your generous waiting we shall reply to you, the Lord favoring, that your waiting shall not seem burdensome to you. Witness my hand at Rothomagum, the 25 th day of August. (1199 A. D.)
Following is a letter of credit dating from the second year of the same reign. This also is translated from the Latin.

## LETTER OF CREDIT OF THE REIGN OF JOHN

John, by the Grace of God . . . to all merchants, etc. Know, all of your body, that we do appoint the bearers of these presents, Hugo of Feritas and Robert of Sablenc, to prosecute our business at the Senate of Rome, and to merchants from whom they shall have borrowed money up to 500 marks silver, for prosecuting this business, we shall be held bound to pay the money in full. And by these presents we are constitute principal debtors for this amount and, the term agreed upon, in accordance with the convention made between our aforenamed clerks and the merchants. To those who shall bring these presents to us or to our mandatory along with letters from the aforenamed clerks showing the sum of money borrowed from the protestants we shall cause the money to be paid in full. Witness my hand at Fissa, the 6th day of January. (1201 A. D.)

The transactions with the Italians ended disastrously for them and disgracefully for Edward III, when, because of his failure to meet his obligations to them, the great Florentine houses, known as the Bardi and the Peruzzi, were unable to meet their commercial engagements, and finally became bankrupe.

## The King's Factor

Dating from the reign of Edward III we find the kings of England having dealings with English merchants. The king's factor (financial agent-banker) held an honorable position at court. He was charged with the arduous duty of keeping the king's coffers filled. One of the first merchants to hold this position was William de la Pole of Hull, who in $133^{8}$ and 1339 lent Edward III what for those times were immense sums of money. He not only freely supplied the King from his own resources, but in order to secure additional sums from othere, he even mortgaged his own real estate. He is styled in all public instruments "our faithful and well beloved merchant." Passing by others worthy of mention, we find, about two hundred years later, Sir Thomas Gresham acting as royal agent or factor for Edward VI and later for each of his sisters, Queen Mary and Queen Elizabeth. Just as De la Pole arranged loana at Antwerp for Edward III, so two centuries later we find Gresham doing for Edward, Mary and Elizabeth. Thus it would appear that after the downfall of the Itealian merchants, De la Pole was able to win the confidence of a group of Flemish merchants and that on the whole their transactions had proven to be sufficiently satisfactory to cause them and their successors to be willing to continue financial relations over two centuries-relations which were to continue for yet other centuries.

Early Italian Corporate Banks
Before we take up the consideration of the development of banking in England let us now retrace our steps and see what happened in Italy following the commercial crisis due to the failure of the Bardi and Peruzzi. It would appear that there were recurrent revivals of business activities and of failures not unlike the recurring crises with which we have become familiar in modern times. Notwithstanding occasional disasters the banks, as they came to be called as early as 1421 , grew and multiplied. They were banks both of deposit and discount. "Giro" payments-that is, payments by means of transfers on the bankers' books-were made from the early part of the fifteenth century. Transferable certificates of deposit were issued and used "like coin." So these early banks were banks of issue as well as banks of deposit. Some of these private banks became very powerful. However, recurrent failures which sometimes were due to bad banking practices, but often to forced loans to the Government which tied up a large part of the bankers' resources in a fixed form, weakened confidence in the private bankers and led to the establishment in Venice, in 1584 , of the first public bank. This was known as the Banco della Piazza del Rialto. This bank restricted itself to keeping depositors' money in security, and to paying it out or transferring it according to their directions.

In 1587 the private banks were suppressed. The need for further banking facilities led in 1619 to the establishment of the famous Banco del Giro, which in 1637 absorbed the Banco della Piazza del Rialto. The Banco del Giro, or, as it came to be known, the Bank of Venice, continued in business until 1806.

Another famous early Italian bank was an outgrowth of the business of the Compania, or Casa, di San Giorgio of Genoa. This institution is described by Andréadès in his "History of the Bank of England" 28 an association of State creditors who managed the revenues of the republic, owned colonies and possessions, maintained armies and fleets, made wat and concluded treaties, and combined with all these various functions the duties of a bank of deposit. Its genesis dates back to the organization in $114^{8}$ of a company to make a loan to the republic. By 1250 a number of such companies, which were called "Compere," were merged under the name of Compera del Capitalo. In 1407 Jean le Maingre, Marshal of France, changed this compera into the Uficio di San Giorgio, which continued until 1736 the business of making advances to the State. It soon became a State within the State, possessing great power and influence. Just how early it began to do a banking business is not evident. Its cartulary or registered notes were somewhat similar in character to modern bank notes. They were certificates of deposit, but as the deposits were not held as a definite fund to secure them but used in the general business of the bank the notes in fact circulated on the general credit of the bank. This bank continued in business until 1797 when it failed. So much for the early Italian banke.

## The Bank of Amsterdam

, In the Bank of Amsterdam, founded 1608 or 1609, the Dutch possessed the third public bank to be organized. Founded after the Italian banke, it continued in business until 1790, when its affairs were liquidated by the city, which guaranteed its solvency. The Bank of Amsterdam theoretically held in trust the actual coin or bullion deposited with it, issu-
ing its notes against such deposits. At a time when the coinages were systematically sweated and clipped the function which this bank performed of practically insuring the integrity of the currency was a valuable one to the commercial community. Thus its notes came to command a premium for purposes of exchange. The failure of the bank was precipitated by the disclosure that its assets had been clandestinely loaned to the Dutch East India Company.

To return to England.

## The English Goldsmith Bankers

Those who first engaged in business operations in England analogous to the modern profession of banking were the Italian merchants commonly known as Lombards. Hence Lombard Street in London, where their homes and places of business were chiefly situated. Naturalized foreigners and finally natives took up the business. The goldsmiths, as they were called, united the trades of the goldsmith, of the dealer in bullion and of the money-lender. In the latter capacity the goldsmith also conducted a pawn-brokerage business. Sometimes the pawns were the royal jewels and the jewels of the nobility, for the goldsmith was a canny person and usually took good care to obtain security for his advances. A traveler who visited England from the Continent in 1593 tells us that in Lombard Street he saw "all sorts of gold and silver vessels exposed to sale, as well as ancient and modern coins." The goldsmiths gave and took a bond on receiving and lending money. They exacted heavy payments for their loans. About the time of Charles I-say, from 1625 it became customary for the merchants to entrust their balances to the goldsmiths. Before that, for some time, they had been in the habit of depositing them for safekeeping in
the Tower of London. However, after Charles had seized $£_{130,000}$ temporarily deposited in the Tower while en route from Spain to Dunkirk, the merchants were afraid to make further deposits, even though, after they had consented to make the King a loan of $£_{4} 0,000$, he had released this particular deposit.

They then got into the habit of entrusting their surpluses to their cashiers. Some of these, of a thrifty turn of mind, instead of "wrapping their talent in a napkin" deposited the trust fund with the goldsmiths and so realized interest which substantially increased their yearly stipend from their employers. The latter then awoke to the fact that by such an arrangement their funds could be safeguarded and income increased and so deposited them directly with the goldsmiths for their own account.

This custom developed greatly during the troublous times of the civil wars and in the Cromwellian era until it is said that half the gold in the kingdom came to be stowed away in the goldsmiths' vaults. The banking business of the mercantile community was in the goldsmiths' hands and from this business they derived handsome revenues, laying the foundations for fortunes, some of which have continued to the present day, and for banking businesses which in one form or another still endure.

Charles II dealt the goldsmiths and their clients a cruel blow when in 1672 he confiscated the loans which the goldsmitha had made to the Exchequer. This "Stop of the Exchequer," already noted in a previous chapter, involved the large sum of $£_{1,328,526}$ and, as might be expected, was followed by serious consequences to the goldsmiths and to the entire community.

## Chapter III

## The Early History of the Bank of England

THUS it was when, about twenty years after the happening of the events just described, William Paterson of Dumfries came forward with a project for a bank which would be the equal in strength of the Banks of Amsterdam, of Venice and of Genoa, he received a ready hearing in business circles. In 1691 Paterson urged the establishment of a national bank, so as to provide a safe means of borrowing money at proper rates of interest. Many of the great London merchants supported his project, notably, Michael Godfrey, one of the richest and most honest city men of that time. The plan was coldly received by Parliament, but the necessities of the Government for funds with which to prosecute the war against France led a committee of the Commons, to which a consideration of the project had been referred, to advise Paterson that they would receive any proposal to advance one million pounds on a perpetual fund of interest. As the committee were unwilling to concede any reciprocal rights, Paterson and his friends naturally were not interested and abandoned the project for the time. Finally in 1694 they achieved their purpose, but the proposal "had to be smuggled into Parliament under cover of a bill imposing a new duty on tonnage, for the benefit of the capitalists lending money toward carrying on the war with France." This was known as the Tonnage Act.

As it finally became a law the bill provided that the subscribers to a perpetual loan of $£ 1,200,000$ should form a corporation to be called "The Governor and Company of the 180]

Bank of England." The fund so raised was to be loaned to the Government.

## The First Years of the Bank

When the Bank of England was organized in 1694 it combined all of the methods of banking then known. Its capital of $£ 1,200,000$ was loaned wholly to the State for an annual return of $£_{100,000}$-that is, for "an interest" of 8 per cent. and $£_{4,000}$ for management. The Bank acquired the right to receive deposits, to issue its demand notes and to loan its funds. It also bought and sold bills of exchange. It was organized entirely with private capital and as a private enterprise. However, it had very close relations with the State from the day of its organization. At first it had no monopoly rights of any kind. It was political necessity which brought it into being. The Whig government was sorely in need of funds to maintain its existence against foreign aggression, unsettled conditions in Ireland and a latent liking of many of the great Tory families for the deposed James II, whom they would have been pleased to have seen back on the throne. The Bank not only provided William III, sometimes called Dutch William, and his Whig supporters with the original $£_{1}, 200,000$, but it stabilized the exchanges, helped to market the long annuities with which the people were just becoming familiarized, and also, even in those early days, made temporary advances to the Government. The Bank began business without a dollar of cash capital. Its resources were the "fund of credit," as the saying of the time had it, due to its holdings of the Government debt, its note issuing rights and ita deposits.

The good effects of such an institution were immediately telt. The Exchequer officials no longer had to make "fre-
quent processions to the city to borrow money on the best and nearest public securities, at ten or twelve per cent. per annum interest." The mercantile community had a source from which to obtain loans at reasonable rates, and the foreign exchanges were rendered more stable. One of the earliest and most important of the public functions of the Bank was to assist in the rehabilitation of the coinage which was so debased at the time of William's accession that one of the first acts of the new government had been to arrange for its restoration.

In the early days the Bank allowed interest on its notes and also upon its deposits, a practice afterward abandoned. Today the Bank is chiefly a bankers' depository and therefore an offer to pay interest upon deposits would place it in competition with its chief patrons and interfere with its functions as the holder and protector of the ultimate banking reserve of the nation. On the other hand, in the inception of its business it desired to build up its deposits and increase its note issues by attracting money from the goldsmiths; therefore the payment of interest was a powerful lever for this purpose. The Bank was nearly wrecked in the second year of its career by its goldsmith enemies, who, taking advantage of the fact that there was a great scarcity of coin because of the restoration of the coinage then in progress, gathered up quantities of the Bank's notes and demanded immediate redemption. As the Bank could not promptly enough secure coin from the mint it could not respond and was temporarily compelled to suspend specie payments. To ease this situation the first Exchequer bills were issued.

The necessities of the Government led from time to time to overtures to the Bank for larger advances. Taking advantage of such situations the Bank made them the basis for securing valuable concessions and additional privileges, in
particular a monopoly of note issue. Mutual concessions on the part of Government and Bank were made, until today the Bank has the exclusive right of note issue in England, except for the unimportant exception noted on page 192, the management of the debt, the Government deposit accounts, freedom from taxation and other privileges. The ownership and control of the Bank remains to this day in the hands of its proprietors. The State has no proprietary interest in the capital of the Bank and no voice in its management.

Instead of attempting a detailed history of the Bank we may to better advantage consider certain special happenings in its long career.

There are three especially notable periods in this history. These are the ewenty-three years of the Great French War, the events of 1844 and the connection of the Bank with the financing of the recent war. The notable services rendered by the Bank during the crucial period of the past six years have already been discussed. We may now consider the two other great crises in ita history
Lessons of Eightcenth Century
Commercial Crises
We may note in passing that the Bank successfully weathered the commercial crises of 1763,1772 and 1783 and the directors learned by experience "that while a drain of specie is going on their issues should be contracted as much as possible, but that as soon as the tide had given signs of ceasing and turning the other way it was then safe to extend their issues freely." The control in normal times of the inflow and outflow of specie by raising or lowering the bank rate of discount was another lesson which the managers learned and

[^5]have ever since used effectively, except during the suspension of specie payments during and following the French wars and the practical suspension of such payments since 1914.

The industrial revolution in England in the early part of the eighteenth century, due to the invention of labor saving devices and the discovery of new processes of manufacture, led to a concentration of population, to great activity in manufactures and in commerce and hence to the need for banking facilities on an enlarged scale. As joint-stock banks were prohibited, as more fully explained in a later chapter, this need was supplied by many small banks of issue and deposit organized by six persons or less-shop-keepers, chemists, tailors and bakers, or what not. The country and city thus were flooded with circulating notes of weak banking partnerships. Many of these issues proved to be worthless. From 1750 to 1783 the country banks increased from twelve to four hundred. In the crises of 1793 and 1797 many of these banks failed.

## Chapter IV

## The Bank and the Great French War

IN 1793 when England was drawn into the maelstrom of war in Continental Europe, brought about by the French Revolution, the Bank was in a strong condition. Its capital had reached $£_{11}, 786,000-$ all loaned to the Government. It had a surplus ("The Rest") of over $£ 3,000,000$. It had notes outstanding for $\boldsymbol{f}_{11}, 600,000$. Its apecie reserve was about £5,000,000. William Pitt was Chancellor of the Exchequer. The war came to him and to his confreres as a surprise. The English people had been watching the revolutionary proceedings in France with great interest. They had not expected that England would be involved. Pitt and his government had made all of their plana for a long period of peace in which to fully recover from the losses of the American War which were still keenly felt.

Therefore the determination to engage in war with France found the Government unprepared, the Exchequer empty, or relatively so, and the country still aghast at the burden of debe which had accrued from the American War and the other wars of the eighteenth century. General business conditions were bad, due to 2 succession of bad harvests and the culmination of a period of overtrading. Many country bank failures were occurring. The Bank of England itself became alarmed, contracted its credits and raised the rate of discount. To relieve the situation the Government had found it necessary to authorize a special issue of Exchequer bills to be loaned to merchants.

It was in the midst of such financial conditions that Pitt
was forced to find the means with which to finance the war needs of England and her allies. Great sums must be sent abroad for subsidies and for the support and pay of the army and of the navy. The Finance Minister and the City had a very difficult situation with which to deal-depleted resources, adverse exchanges, heavily increased demands. Under the circumstances it is small wonder that Pitt used the resources of the Bank to the limit. He first secured legislation removing the restriction which Parliament had originally laid upon advances from the Bank to the State. The Bank was then at his mercy. In four years, from 1794 to 1797 inclusive, the debt of the Government to the Bank for advances of various kinds totaled just under ten million sterling. To meet the demands upon it the Bank increased its note issues. Meanwhile its cash resources were running down in an alarming way. After increasing to about seven million pounds in 1794 they fell to six million in February 1795, to five million in August, to an average of a little over two million in 1796 and finally to $£ 1,086,000$ in February, 1797.

## Specie Payments Suspended 1797-1821

The inevitable happened. Specie payments were suspended, not to be resumed until 1821 . For a quarter of a century England was to experiment with an inconvertible currency.

The King himself presided at the meeting of the Privy Council which authorized the suspension. A meeting of bankers and merchants passed a resolution agreeing to accept the notes of the Bank for payments due them. This resolution was supported by some four thousand signatures. The matter was referred to Parliament for action. An examination by a parliamentary committee disclosed the fact that in addition
to the permanent debt of $£_{11,700,000}$ represented by its capital, the Bank had loaned the State over ten million out of its other assets of $£_{17,600,000}$ leaving as an offset against $£_{13}$,800,000 demand liabilities and about $£ 8,600,000$ notes about £7,600,000 of banking assets other than obligations of the Government. Not exactly a liquid condition, especially when it is remembered that the apecie reserve had fallen to $£ 1,086$,$\infty$. Substantially all of the floating debt of the State was then held by the Bank.

How was this situation dealt with? Parliament passed what is known as the Restriction Act. This granted the Bank and all connected with it a bill of indemnity. The Bank was forbidden to pay out specie except for the needs of the army and navy and for other special purposes approved by the Privy Council. The Bank was forbidden during the restriction to make advances for the public service in excess of £600,000. Bank notes were made a legal tender in payment to the Government and between others by agreement. Provision was made for the issue of $£_{1}$ and $£_{2}$ notes and, for amaller payments, Spanish dollars were put in circulation, at a valuation of 4 s 6 d .

Pitt threw all of his influence in favor of the conservation of the Bank's credit, 20 that during the remainder of his lifetime there were no excessive issues of notes. Therefore they remained substantially at par with gold. After Pitt's death, from 1809 to 1817 , the issues of notes steadily were increased. This course of action was due partly to the exigencies of the Government and partly to the speculative conditions in the business world.

It will be remembered that Napoleon endeavored to bring England to her knees by closing to her all of the Continental ports and markets. While such closing was only partial, as
many ways were found of evading the edict, still it acted as a great stimulus to the home production of articles which would otherwise have been imported. At the same time the South American colonies of Spain and Portugal were declaring their independence and opening their ports to English products. These conditions led to speculation, which the Bank encouraged by greatly expanding its credit facilities. These facilities were further accentuated by the large amounts of Exchequer bills put out by the Government, plus the considerable sum of inland bills of exchange which was in use and the country banks' bills which were in circulation.

## Effects of the Suspension

Advancing prices of commodities, including gold, and adverse foreign exchanges were the barometers which measured the inflation produced by the large issues of bank and Government paper. According to Andréadès, after being at a discount of $£ 87 s$ per $£ 100$ in $180 r$ and $£ 75 s$ in 1802 , Bank Notes were almost at par (average $£_{2} 3 \mathrm{~s}$ discount) from 1803 to 1809 . The depreciation then became marked, averaging as follows, until the resumption of specie payments in 1821:


Silberling, by another basis of computation, arrived at the conclusion that the premium on gold in 1811 averaged nearly 22 per cent., in 1812 over 32 per cent., in 1813 over 40 per cent. The Hamburg exchanges averaged 18 per cent. from normal in 1810, nearly 31 per cent. in 1811, over 24 per cent.
in 1812, and over 26 per cent. in 1813. Commodity prices advanced until about 1814, averaging at their highest point about 70 per cent. above those of the pre-war period.

## The Bullion Report

In 1810 a committee of Parliament known as the "Bullion Committee" made an exhaustive study of the causes which had produced these conditions, so far as they had then developed. The report of this committee is one of the landmarks on the highway of economic studies and is well known to all students. Therefore, we may to advantage refer briefly to the conclusions of the committee as set forth in the report. The points in controversy which they set themselves to solve were these: Have the bank notes depreciated in value or has the price of gold actually risen? Has the increase in the volume of the notes had any influence upon the exchanges? What effect would a restriction of the issues have on the price of gold and the rate of the exchanges? What policy should be followed in regard to the regulation of the issues? The committee called before them bank directora, private bankers, merchants and others. The conclusions at which they arrived were these; First, that an inconvertible and excessive credit currency caused a general rise in prices, including that of gold, and a fall in the exchanges on all countries except those which had an equally depreciated currency. Second, that there then existed an excessive paper currency. Third, that the only true and proper remedy was resumption of cash payments.

Unfortunately Parliament took an opposite view of the case. This encouraged the increasing issues on the part of the Bank, leading to the conditions, up to 1817 , which we have already noted.

Resumption of Specie Payments in I82I
These conditions referred to were so serious that on February 3, 1819, the two houses of Parliament each appointed a Committee to inquire into the position of the Bank. These Committees, after hearing the views of bankers, publicists and others, recommended a gradual resumption of specie payments. In pursuance of their recommendations an Act was passed unanimously in 1819 providing for the resumption of specie payments on May 1, 1823. This date was anticipated by two years, the metallic basis again becoming effective May 1, 182I.

## Chapter V

## The Joint-Stock Banks

IN 1697, Parliament evidently intended to give the Bank a virtual monopoly, since no other corporation of the nature of a bank was to be established thereafter by Act of Parliament. However, this Act did not forbid the formation of joint-atock companies for other purposes nor forbid them to undertake a banking business. Shortly thereafter a corporation, called the Company of Mine Adventurers of England, issued circulating notes, and apparently in so doing was quite within its legal rights under the Act of 1697 . In 1708 , to clear up this situation Parliament enacted, "That during the continuance of the said corporation of the Governor and Company of the Bank of England, it shall not be lawful for any body politic or corporate whatsoever * * or for any other persons whatsoever, united or to be united in covenants or partnerships, exceeding the number of six persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand, or at any time less than six months from the borrowing thereof."

As the issuing of notes was at that time considered to be the very essence of banking, this Act was popularly taken to forbid the organization of any other bank. In fact it only forbade the organization of banks of issue by strong corporations, but left the door open for any group of six persons or less, however irresponsible, to engage in banking and to issue notes. It was thus that the great number of mushroom country banks came into being whose failure precipitated or accentuated commercial crises for more than a century and whose note issues increased the redun-
dancy of the currency during the period of the suspension of specie payments.

By an Act passed in 1826 corporate banks of issue were permitted if located more than 65 miles from London. This continued to be the law until 1844 when Parliament deprived both private banks and joint-stock banks of the right of issue as explained in the next chapter discussing the Bank Act of 1844. However, those actually in existence-viz: 72 jointstock banks and 207 private banks-retained limited privileges of note issue. The law provided that as such privileges lapsed they should accrue to the Bank of England. At the present time (1920) only six private banks and three jointstock banks have issue rights and the aggregate authorized issues of these banks is only $£ 334,820$.

In 1733 Parliament affirmed the legality of joint-stock banks which issued cheques. The Bank of England had vainly endeavored to prevent the passage of such legislation. Steps were at once taken by James W. Gilbart and associates to organize "The London and Westminister Bank." This bankwas opened at 38 Throgmorton Street, with a branch at 9 Waterloo Place. In its prospectus it was stated that the bank would receive current accounts and that persons who did not care to keep a balance might "instead thereof, pay to the bank a certain sum annually for the management of their account." Interest at the rate of two per cent. per annum was offered on sums ranging from $\boldsymbol{f}_{10}$ to $£_{1000}$ received on "permanent lodgment." No interest was allowed on the balance of a current account.

In 1832 there were 62 private banks in London. In 1834 the number of private country banks and branches thereof in England and Wales was 638 and there were 45 joint-stock banks. Therefore, at or about the time of the organization
of the London and Westminster Bank, there were in England about 745 banks and banking offices in addition to the Bank of England and its 12 branches. We are without information as to the resources of these banks, other than the Bank of England. It is of interest to note that Barclays Bank, which absorbed the London and Westminster in 1918, had according to a recent report over 1400 branches. The joint-stock banks of England and Wales now number only about 22 and the private banks 7-say, about 29 in all-but they have in the neighborhood of 6,300 branches. This great decrease in the number of banks and increase in branches is due to the policy of bank consolidations which has been a marked feature of English banking for so many years and especially during the last two or three years. On December 31, 1919, the total recources of the joint-stock banks of England and Wales were about $£_{2,300}$ nillion. Of these vast resources, $£_{1742}$ million $\rightarrow$ ay, 76 per cent.-were held by five great banks. In alphabetic sequence, these banks, their liabilities and equivalent resources on December 31, 1919, were as follows:

THE "BIG FIVE" JOINT-STOCK BANKS In Milliona Sterling

| Name | Capital and <br> Reservea | Acceptances and Endorsements | Deposita (inc. Undivided Profits, etc.) | Total Liabilitien |
| :---: | :---: | :---: | :---: | :---: |
| Barclaye. | 15,8 | 13,6 | 296,1 | 325.5 |
| Loyds | 19,2 | 32,I | 325,9 | 377, ${ }^{1}$ |
| London $\mathrm{CO}_{n}$, Wentminater and Parr'a | 17.3 | 23.7 | 305,8 | 346,8 |
| London Joint City and Midland | 16,8 | 29,0 | 373.0 | 418,8 |
| National Provincial and |  |  |  |  |
| Union | 15,0 | 6,0 | 252,4 | 273,4 |
|  | $840^{\circ}$ | 1046 | 1553,2 | 1741,6 |

## Chapter VI <br> The Bank Charter Act of 1844

BEFORE taking up the consideration of the legislation of 1844 we may make note here, for the sake of the record, of some items of importance in regard to the Bank. The liability of the stockholders of the Bank of England is limited to the amount of their stock. In 1722 the reserve fund or Rest was established, never to be allowed to run below three million pounds. This added to the strength of the Bank and made it possible to equalize dividends which theretofore had fluctuated greatly. In 1751 the administration of the debt was entrusted to the Bank and in 1826 the Bank was given authority to establish branches; of these, there are now ten, located respectively at Birmingham, Bristol, Hull, Leeds, Liverpool, Manchester, Newcastle, Plymouth, and the Western and Law-Courts Branches, London. The notes of the Bank were made a legal tender in 1833.

## Bank Statements in England

i: In 1833 the Bank was required to render weekly statements to the Chancellor of the Exchequer, which statements were to be consolidated and published every three months in the London Gazette. The statements published by the Bank are very meagre and do not give one a complete view of its affairs. For comparison of one period with another, too, they are of little value, as it is the practice of the Bank to reduce the amount of its securities and deposits by any borrowing which it carries out and as it probably makes other adjustments which are not of public record. After 1875 it discontinued publishing the amount of discounted bills which it 194]
held. After 1877 it ceased publishing the London bankers' balances. After 1880 the separation formerly made between notes issued by the branches and in London was no longer made. To an American banker accustomed to the rigid supervision given to the affairs of the banks of the United States by State and Federal governments and to the limelight of publicity which is turned on the affairs of our banks the lack of such supervision in Great Britain and the failure to require publicity is a surprise. It is because of such failure to enjoin any uniform system of accounting or of reporting that it is so difficult to make a really thorough and scientific study of English banking. Apropos of this the London Economist in its Banking Number issued May 17, 1919, says: "The figures published weekly by the Bank are at all times full of anares for the unwary investigator, and are more so than ever in wartime, owing to the very complicated business that has to be done by the Bank, and the consequent cross currents that are concealed behind the inarticulate reticence of the items in its return. Any future historian who relies too closely on the Bank's figures for information is thus likely to flounder up to his neck."

## The Bank Charter Act of 1844

Recurrent commercial crises, and especially the crisis of 1836-1839 which brought the Bank to the verge of ruin, led English bankers and economists of the time to make exhaustive studies of the causes of such events. The rule which had been formulated by the Bank for the conduct of its business was as follows: First, the reserve kept, composed of bullion and of securities, was to be equal to its liabilities. Second, the regulation of the note circulation was left to the public through the natural movement of the foreign ex-
changes. Third, whether the demands on the Bank came from at home or abroad, it was to maintain a metallic reserve equal to one-third of its liabilities. This supposed rule it was difficult invariably to observe. In fact it was often broken.

A heavy drain of specie in 1839 carried down the reserve to a nominal amount. The condition of the Bank became so serious that it was only saved from failure by the use of heroic measures the most important of which was a large loan from the Bank of France which had been founded in 1800 by Napoleon.

It was evident to the thoughtful banking men of the day, and to other students of finance, that steps must be taken to safeguard the Bank's reserves in future. It was desirable also, if possible, to stop these recurring periods of distress in the business world. Following a customary English method for dealing with difficult problems, a parliamentary committee was appointed to examine into the causes of the trouble and to suggest a remedy. This committee sat for over five years and asked more than 14,000 questions without reaching any definite conclusion or even presenting a report. Finally Sir Robert Peel, then Prime Minister, decided that it was time to bring matters to a head. Therefore, taking advantage of a clause in the law which empowered the Government to suspend tbe Bank's charter in 1845, he brought forward a bill which became the Bank Charter Act of 1844 .

Convinced that the source of the trouble was due to overissues of currency, he sought to devise a plan which would cure this evil. He proposed to take away from the private and joint-stock banks the right of issue and to concentrate all such rights in the Bank of England. Further to guard against over-issues he proposed that, save for a minimum
artount, all issues of the Bank should be covered by an equivalent amount of apecie, especially reserved for their redemption.

## Provisions of the Act

The law based on these propositions provided as follows:

1. After August 31, 1844, the Bank of England was to be divided into two departments, the issue department and the banking department. Securities to the amount of $£_{14,000,-}$ $\infty$, of which the perpetual Government debt of $£_{11,000,000}$ was to form a part, were to be transferred to the issue department; aloo all the gold coin and gold and silver bullion not needed in the banking department. The issue department was to give back to the banking department an amount of notes equal to the securities, coin and bullion so transferred to it. It was provided that the silver in the issue department should never exceed one-fourth of the gold.
2. The limited rights of issue continued to bankers already having such rights, as they lapsed, were to the extent of two-thirds thereof, to revert to the Bank. Thus it is that today the Bank has a right of issue against securities of $£_{4,450,000}$ in excess of the original $\sum_{1,000,000}$.
3. The Bank was exempted from all stamp duties on its notes. In lieu thereof it was to pay the Government a lump sum of $£_{180,000} a$ year.
4. The Bank was obligated to buy standard gold whenever offered to it, giving in payment its notes at $£_{3} 1789 \mathrm{~d}$ per ounce.
5. Weekly accounts in a specified form were to be sent to the Government and published in the London Gazette weekly, instead of quarterly as required by the Act of 1833 .

This division of the functions of the Bank into two departments has been severely criticized as arbitrary and unscientific.

## Suspensions of the Act

The result of the legislation was to put the management of the Bank in times of crises in a strait-jacket, as far as notes were concerned, from which they could escape only by special enabling legislation by Parliament. This has been had four times in the history of the Bank-in 1847, in 1857; in 1866 and in 1914. The mere fact that additional notes could be issued has of itself, in each case, been sufficient to allay the fears of the business community. The increase made in the amount of uncovered note issue in the earlier periods was trifling, while in the last instance an important increase was made unnecessary by the issuance of the Government Treasury notes. As a matter of record it may be noted that for a couple of days while Treasury notes were being printed there was an excess fiduciary issue of Bank notes amounting to $£_{3,043,000}$.

Under the Federal Reserve System of the United States and of the Continental state banks, notes are created and issued on the security of discounted bills and on the specie reserve. Thus theoretically the volume of notes is responsive to the requirements of business, expanding and contracting with the periods of activity and quietude. On the contrary, with the Bank of England the note issue can only be increased against the deposit of specie in the issue department. As the bank carries substantially the entire specie reserve, such deposits can only be made by the withdrawal of gold from the banking department, thus weakening the reserve against deposits and therefore the confidence of the business
community just at a time when the contrary conditions should prevail. Therefore there is a growing feeling on the part of many bankers that the two departments of the Bank should be merged and the note issuing powers modernized.

However, in times of great stress, such as the world has just been passing through, the best of systems tends to give way to emergency measures which cannot be defended on any principle of sound banking. The Bank of England has come through the storm in strong condition and has done yeoman service in upholding the hands of the Government and of the business community. This does not change the fact that upon a return to normal conditions it may be wise definitely to repeal the Act of 1844 in favor of a system based upon banking experience gained since that time.

## Chapter VII

## The Government of the Bank

THE method by which the Bank of England is governed is so unique and so different from that observed in connection with any other bank that it will be of interest to consider it in some detail. The bank is governed by a board of twenty-four directors, a Governor and a Deputy Governor.

## The Directorate

The Board of Directors is self-electing. In theory, a certain portion go out annually, remain out a year, and are subject to re-election by the proprietors, but in fact they are nearly always re-elected after a year. This has been the unbroken practice for many years. When a vacancy occurs by death or resignation it is filled by an election by the board. It is the practice in electing new members to choose young men, usually men connected with old established mercantile firms of London. The status which is given by an election to the board, both to the individual who fills it and to the firm of merchants to which he belongs, is considerable. The selection of men to receive this honor is made with great care for 2 reason which will now be stated.

## The Governor and Deputy Governor

The offices of Governor and Deputy Governor are given in rotation. The Deputy Governor always succeeds the Governor and usually the oldest director who has not been in office becomes Deputy Governor. Occasionally, for 200]
upecial reasons, the election for the Deputy Governor is not always made in rotation, but except in rare cases a director must serve as Governor and Deputy Governor about the time when his turn comes. On the other hand, he will not be asked to serve much before his tum. It is usually about twenty years from the time a man is first elected a director before he arrives, as it is called, "at the Chair." Because it is important that the men who fill the offices of Governor and Deputy Governor should still be in the vigor of life, the choice of new directors is always made from among young men. It might be feared that such a course would place upon the Board men who would be overambitious or would take chances which older men would not take, but the danger of such a happening is overcome by the fact that some of the directors retire annually. By courtesy it is always the young directors. Those who have served as Governor always remain. Therefore the young part of the Board is the fluctuating part, and the older part is the permanent part. The younger men, therefore, have but little influence.

## The Committee of Treasury

As a further provision against any immature methods of handling the affairs of the Bank, the older members of the Board form a standing committee of indefinite powers. This is called the Commitree of Treasury. No precise description has ever been given of the powers which this committee exercises. They appear to be of a general supervisory nature and in particular to control the relations and negotiations between the Bank and the Government.

By immemorial usage, the directors of the Bank of England cannot be themselves professional bankers. In the old times every bank was supposed to be more or less in opposi-
tion to every other bank. Therefore it was not thought wise that any London banker should have a chance of being a Bank director and no banker today would think of being such a director. However, this does not prevent the selection for directors of men who are connected with merchant banks which do not receive deposits payable in small sums or on demand.

## The Officers

In the Bank of England there is no fixed executive. The Governor and Deputy Governor who form the executive, as a rule change every two years. They are expected to be constantly present at the bank, to see all applicants for advances, to carry on the almost continuous correspondence between the Bank and its largest customer, the Government, and to bring all necessary matters before the Court of Directors or the Committee of Treasury. In a word, to do very much the same as falls to the lot of the manager in most companies. There are, of course, permanent heads of departments, and it is understood that during the war some important new departments were created. While these men have high standing in the Bank and much authority in their respective departments; yet they are essentially subordinate. No one of them is like the general manager of an ordinary bank.

A changing management, such as the one by which the Bank is governed, would not be thought of in connection with any other corporation. It also seems strange that trained bankers should be excluded from the Board of Directors of the Bank which up to the present time has been admittedly, in a sense, the reserve bank for the world's commerce.

## The Court and Committees

The directors of the bank, together with the Governor and Depury Governor, twenty-six persons in all, are known $2 s$ "The Courr." They meet once a week and usually sit for a very short time only; say, from about eleven or twelve o'clock until one or one-chirty. It has been said that if they were to sit for four hours there would be a "panic solely from that."

The Court of Directors is divided into certain committees. In addition to the Committee of Treasury already described, there is a Committee of Daily Waiting, a Committee for Lawsuits and the Management of Branch Banks, a Committee for the House and Servants and Clerks, a Committee of Inspection for the Cashier's Office and a Committee of Inspection for the Accountants' Office. In addition to these committees apecial committees are from time to time appointed as occasion may require.

The Committee of Daily Waiting consists of three directors in rotation from the whole body. Their attendance is at It:30 daily and they are required to remain until all that part of the business of the day which is usually referred to them is concluded. All bills offered for discount in London are submitted to this committee and all bills discounted at the country branchea, except local bills, are shown to them on the following day. They likewise have charge of all bullion not required by the cashiers for daily wants. The duties of the other committess are evident from their titles.

## The Clerical Machinery

The clerical machinery of the Bank is divided into the "Cash Side" and the "Accountant Side." The "Cash Side,"
which is under the immediate supervision of the Chief Cashier, comprises the transaction of all business where actual cash is concerned, together with the necessary bookkeeping which it involves. The latter division, under charge of the Chief Accountant, takes cognizance of all matters of pure bookkeeping where no actual cash is concerned, such as those which relate to the national debt account, registration of bank notes and kindred work.

The Bank has a large staff of employees for whose benefit there is maintained a provident society to promote life insurance among their members and the payment of annuities for widows of bank clerks and porters. There is a well appointed library and reading room. There is a physician in attendance who is called the Medical Officer. He looks after the health of the clerks and other employees. The clerical force of the Bank is employed on a strictly civil service or competitive plan. Men entering the Bank in their youth frequently spend their entire lives in its service.

## The Bank Building

The building of the Bank of England is located in the heart of what is known as "The City," the corporate center of London now chiefly identified with the interests of city government and finance. In this section is the Mansion House, where the Mayor presides over the destinies of the city. Nearby is the Royal Exchange founded in the days of Queen Elizabeth, and the Stock Exchange the traditions of which also date bask to the very early days. Lombard Street, the home of the goldsmiths and for many years the chief financial street in London, is nearby. The head offices of the joint-stock banks and of the great private banking houses are not far away.

The entrance to the bank is from Threadneedle Street through a large arched gateway which leads into a quadrangular court from which communication may be had to all parts of the building. This court is guarded by a porter arrayed in brighe crimson and gold lace and bearing a staff; while the bank messengers are dressed in swallow-tail coats of a delicate almon color with silver buttons, flaming scarlet waistcoats, black trousern and high silk hats.

In the basement of the bank are barracks wherein 36 soldiers are quartered from $70^{\circ}$ 'clock every evening until the next morning. This custom arose at the time of the Lord George Gordon riots in June, 1780, when the bank was threatened by a mob. In addition to the soldiers there is a body of watchmen well trained in the use of the ample arrangements provided for in case of fire.

The building covers about eight acres of ground. The first atone was laid in 1732. It is erected around nine courtyards, the largest one of which has a substantial amount of green sward with one or two beautiful elm trees and some shrubbery. There is also a fountain playing beneath the trees. For the frot forty years of its existence the Bank was domiciled in the hall of the Grocers' Company, but in 1734 moved into the present building. In the great hall of the bank building there is a atatue of William III, in whose reign, it will be remembered, the bank was founded.

## Chapter VIII

## The Scotch and Irish Banks

IN what goes before we have confined our studies to the status of banking, to use the words of one of the Bank Charter Acts, "in that part of Great Britain called England."

The first notice of banking in Scotland which occurs in the statute books is an act of King William III passed in 1695, under which the Bank of Scotland was established. The Bank of Scotland remained the only bank in Scotland until the year 1727. At the date of the latest available reports (December, 1918) there were eight joint-stock banks in Scotland with $\mathbf{1 , 2 4 9}$ branches. These banks had total resources of $£ 273,658,000$. Their combined note issues on December 31, 1919, amounted to $£ 28,705,345$, comparing with $£ 7,744$,000 December 31, 1913, an increase of $£ 20,961,345$.

The Bank of Ireland was established in 1783. Its privileges resemble those of the Bank of England. At the close of 1918 there were nine joint-stock banks in Ireland with 848 branches and combined resources of $£_{175,739,000}$. The outstanding note issues December 31, 1919, were $£_{30,532,435,}$ comparing with $£ 8,074,000$ December 31, 1913, an increase of $£ 22,458,435$.

## Note Circulation-How Regulated

The bank note circulation of the Scotch and Irish banks is regulated by the Bank Acts of 1845 . These Acts authorized the Scotch banks to make uncovered, or fiduciary, issues fixed at an aggregate of $£_{3,087,209 \text {. As a result of the failure of the }}$ Western Bank of Scotland in 1858 and of the City of Glasgow Bank in 1878 the authorized fixed issue was reduced and is now $£ 2,676,350$. The Irish banks were authorized to make 206]
uncovered issues fixed at an aggregate of $£ 6,354,494$. There has been no change in this authorization.

The Scotch and Irish banks may increase their circulation to any extent in accordance with the public demand, provided that they have gold or silver at their principal places of issue to an amount not less than the amount of such increase. The amount of silver against which notes may be issued must not exceed "one-fourth part of the gold coin held."

The amount of notes which may be outstanding against specie is determined by averaging the note issues and the specie cover every four weeks. This provision of the law makes it possible temporarily to increase note issues without corresponding cover.

The specie held in Scorland and Ireland does not form a special security against the note circulation. It is an asset held against the general liabilities of the issuing bank. It will be remembered that in the case of the Bank of England the specie securing the notes in excess of the fiduciary issue is held in the issue department solely as a reserve for the notes issued against it, while no notes can be issued, for ever $s 0$ brief an interval, unless the specie is actually on deposit.

By the terms of the Currency and Bank Notes Act of August 6, 1914, the note issues of the Scotch and Irish banks were made legal tender and authority was given to substitute the Government Treasury notes for specie as a cover for notes issued in excess of the authorized fixed, or fiduciary, issues. By a royal proclamation made in December, 1919, the legal tender status was withdrawn from Scotch and Irish bank notes to take effect from January 1, 1920, and the pre-war status restored, but no change was made in regard to the provision whereby Government Treasury notes may be used as cover for the note issues in excess of the fixed, or fiduciary, totals.

## Tables

## NATIONAL DEBT

## United Kingdom-Great Britain \& Ireland <br> Approximate Amount-March 31, 1920

For further details see numbered descriptive notes following table
ooo omitted

|  | Interest |  | Redeemable or Payable |  | Out- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Title of Loan | Rate | Payable |  |  | standing |
| Funded Debt |  |  |  |  | $\pm$ |
| 1. Consolidated Stock . | 215 | 5 Ja., Ap., Jy., Oct | After | 5 April, 1923 | 279.764 |
| 2. Annuities | 23/4 | 5 Ja, Ap., Jy., Oct. | After | 5 Jan., 1905 | 2,689 |
| 3. Annuities | 255 | 5 Ja., Ap., Jy., Oct. | After | 5 Jan., 1905 | 21,528 |
|  |  |  |  | otal Consols | +301,400 |
| 4. Debt to Bank of England. |  |  |  | Perpetual | 11.015 |
| 5. Debt to Bank of Ireland |  |  |  | Perpetual | 2.630 |
| 6. Tolal Furnded Debt |  |  |  |  | 315,000 |
| 7. TerminableAnnuities -Estimated Capital |  |  |  |  |  |
| Value. |  |  |  |  | 20,000 |
| 8. Unfeunded Deet. |  |  |  |  |  |
| g. Waye and Means . Advances |  |  |  |  | 204,900 |
| 10. War Loan . . . . | 314 | I Mar. and Sept. | $\left\{\begin{array}{l}\text { After } \\ \text { On }\end{array}\right.$ | $\left.\begin{array}{l}\text { I Mar., } 1925 \\ \text { I Mar., } 1928\end{array}\right\}$ | 62,700 |
| Ir. War Loan . . . . . | 41/2 | I June and Dec. | $\left\{\begin{array}{l}\text { After } \\ \text { On }\end{array}\right.$ | $\left.\begin{array}{l}1 \\ 1 \\ \text { Dec, }, 1925 \\ 1945\end{array}\right\}$ | 13,000 |
| 12. War Loan . . . . | 5 | I June and Dec. | $\left\{\begin{array}{l}\text { After } \\ \text { On }\end{array}\right.$ | $\left.\begin{array}{l}\text { I June, } 1929 \\ \text { I June, } 1947\end{array}\right\}$ | 1,949,300 |
| 13. War Loan . . . . | 4 | 15 April and Oct. | $\left\{\begin{array}{l}\text { After } \\ \text { On }\end{array}\right.$ | $\left.\begin{array}{rlr} 15 & \text { Oct., } & 1929 \\ \text { I5 Oct., } & 1942 \end{array}\right\}$ | 62.300 |
|  | - |  |  |  |  |
|  |  | Carried forwa |  |  | 2,627,200 |
| $\dagger$ Total correct | ems | approximate. |  |  |  |

## NATIONAL DEBT-Continued <br> United Kingdom-Great Britain \& Ireland

Approximate Amount-March 31, 1920
Fof furcher detalle ewe numbered descriptive motes following table


## NATIONAL DEBT-Continued

## United Kingdom-Great Britain \& Ireland <br> Approximate Amount-March 3I, 1920 <br> For further details see numbered descriptive notes following table 000 omitted

| Title of Loan | Interest |  | Redeemable or Payable | Out- |
| :---: | :---: | :---: | :---: | :---: |
| tie of Loan | Rate | Payable |  | standing |
| Internal Debt brought forward |  |  |  | £6,653,500 |
| External Debt |  |  |  |  |

## 24. To United States

Govt. \$4,212,835,993 866,83I
25. Anglo-French Loan
$\$ 500,000,000$, half
taken into account - $5 \quad 15$ April and Oct. On 15 Oct., 1920 . 55,400
26. Five Year Secured

Notes, \$134,458,000. 52/2 I May and Nov. On I Nox., 1921 27,633
27. Three Year Conv.

Notes $\$$ roi,600,000. 53/2 I Feb, and Aug. On 1 Nov., 1922 20,883
28. Ten Year Conv. Bonds 5y/a I Feb, and Aug. On I Aug., $1929 \quad 30,504$
$\$ 148,400,000$
29. Twenty Year Gold

Bonds \$143.587,000. 51/2 1 Feb. and Aug.: On I Feb., $1937 \quad 29.514$
30. Other Debt Created under War Loan Acts

292,035
Total External Debt
£1,318,800
3x. Grand Total Direct Debt $\quad £_{7,972,300}$
32. Guaranteed Loans

Guaranteed Stock
(created under Irish
Land Act. 1903) : 254\% Jan. and July After I Nov., 1933 57.213
Guaranteed Stock
(created under Irish

| Land Acts, 1903 and |  |  |  |  |  |
| :--- | :--- | :---: | :--- | ---: | ---: | ---: |
| I909) . . . . . | 3 | Jan. and July | After | 3 Dec., 1939 | 45,229 |
| Local Loans Stock . | 3 | 5 Ja., Ap., Jy., Oct. | After | Apr., r912 | 77,058 |
| Met. Police Deb. |  |  |  |  |  |
| Stock. . . . . . | 3 | Jan. and July | On | I July, 1920 | 450 |


| Egyptian Government |  |  |  |
| :---: | :---: | :---: | :---: |
| Guaranteed Lcan. . 3 | Mar. and Sept. | At any time | 6,288 |
| Greek Guar. Gold |  |  |  |
| Loan of '98 . . . $21 / 2$ | April and Oct. | Redeemable at par by annual drawinge | 4,300 |
| Guaranteed Loans forwarded |  |  | 90,538 |

## NATIONAL DEBT-Coninued

United Kingdom-Great Britain \& Ireland
Approximate Amount-March 31, 1920
For furthes ceealb mee aumbered deteriptive soces following table


## , DESCRIPTIVE NOTES





 Tes charged more carited to the daking fusd out of which the annaltiee were made payable from June 24, 2752. This way the origin of the $3 \%$ Consolldated asarition, krown is the martet from that time en "Consols." The prevent tave
 Act of ites. Up to Apris s. 18so lateret wea at the rate of $3 \%$ per annum, and for the 84 ronereading fith April g. soos it was at the rete of $2 \% \%$. Since that date the rate has been $13 / 4 \%$. Redeemable at gar oa or after April 5, 2923, is mach order er manner eo Parliament may diruct. See also a ias.

2. K\% Anowrrim eraced th i853 tor the purpone of rederning Eouth Sea etock man certale cid $3 \%$ smanition.
4. Drbt to thr Bane of England:-Perpetual loans made in consideration of franchise as follows:-

> Original Capital:

1694: Act 5 \& 6W. and M.C20 . . . . . . . $1,200,000$
1708: Act 7 Anne, c 7 . . . . . . . . . 400,000
1742: Act 15 G. 2 c 13 . . . . . . . . . . . . . . . . .
Capital purchased of the South Sea Co.
I72I: Act 8 G. I. c, 21 (residue of capital of $£ 4,000,000$ purchased of the South Sea Company) . .
3.328 .300

Other Advances to Government:
1716: Act G. 1 c.8, Balance of $\mathbf{£ 2 , 0 0 0 , 0 0 0 ~}^{\mathbf{2}}$ of Exchequer Bills cancelled

500,000
1727: 1 G. 2 c.8, Advance to Government : : : 1,750,000
1728: 2 G.2 C.3, Advance to Government
1746: 19 G.2 C.6, Exchequer Bills delivered np to be cancelled.

986,800
E11,015,100
5. Debt to the Bane of Irrzand:-Perpetual loans made in consideration of franchise as follows:

6. Total Funded Dert:-The above deacribed issues, $1-5$ inclusive, are known as the Funded Debt. The interest is a charge on certain definite forms of taxation, and is inciuded in the permanent or fixed annual charge. See also page 94
7. Terminable Annuities:-These annuities were created under different acts dating from the time of George IV.
8. UNFUNDED Debr:-All debt, except the Funded Debt and the Terminable Annuities, is technically known as Unfunded Debt.
9. Ways and Means Advancis:-These are book advances made by the Bank of England for short terms. See text page 42.
10. $31 / 2 \%$ War Loan:-Original issue, f350 million. Issued in Nov., r914 at $95 \%$. Inscribed stock; or bearer bonds in denominations of £100, £500 and $£ 1,000$.
11. 41/2\% War Loant-Original issue, $\mathbf{f 9 0 0 , 8 5 7 , 6 9 x}$. Issued June 21 to July 10, 1915, partly for cash at par and partly [say, £z89.797.9aI] in exchange for "Consols" and $31 / 2 \%$ war loan. The greater part of this issue has been exchanged for subsequent war issues. Inscribed stock; or bonds to bearer in denominations of $£_{100}, £_{200} £_{500}, £_{1,000}$ and $£_{5,000}$.
12. $5 \%$ War Loant:-Original issue, $£_{2,075,814, \text { ri4. Issued Jan. II to Feb. 16, 1917 }}$ at 95 for cash and on certain terms in exchange for other previous issuee. Receivable on certain conditions in payment of death duties. Stock and bonds and the dividends thereon are exempt from all British taxation present or future provided they are in the beneficial ownership of a person who is neither domiciled nor ordinarily resident in the United Kingdom. Dividends are exempt, without regard to domicile, if the owner of the stock or bonds is not ordinarily a resident of the United Kingdom. Insoribed stock; or bonds to bearer in denominstions of $£ 50, £ 100, £ 200, £ 500, £ 1,000$ and $£ 5,000$. Interchangeable.
13. $4 \%$ War Loan:-Original issue $\mathbf{2 5 2 , 4 1 8 , 2 5 0 \text { . Issued simultaneously with (ra) }}$ at par in cash and on certain terms in exchange for previous issues. Interest (dividends) exempt from British Government taxes other than super tax. For tax exemption in hands of foreigners see last clause (12). Inscribed stocl; or bonds to bearer in denominations of $£ 50, £_{100} £_{200} £_{500} £_{1,000}$ and $£ 5,000$. Interchangeable.

Depreciation Fund:-The moldere of $4 \%$ and $5 \%$ War Loen are entitled to the benefit of a Siakine or Depreciation Fund which ile under the control of the National Debt Comminamers. This fund io applicable to the purchase and cancellation of the stock and bonda of thia lona whenever the market price of the $4 \%$ loan is bew see or of the $5 \%$ hata blow os. Set Item 34 .
解 per Oct 1,1917 to March 3x, 1914.
Esempt from all Britiab taxition prewent or future If in the beneficial ownerahip of a pernon meither domiciled moe ordimarily readent in the United Kingdom. Dividends are exvempt, withous remand to domicile, if the owner of the atock or boude is aot endimarily a reaident of the United KIngdom. Intereat on the $4 \%$ Bonda errmpt from Britich income tar other than super tar. Received in payment of death dutian exeen profite duty or munition exchequer paymente, if fedd tor dit montion prior to the date of prementation.
Convertibie: $5 \%$ Bonds tato $5 \%$ War Loan. 1929-47 [r2] at the rate of Er00 5\% War Loes for esch Los mominal value $3 \%$ National War Bonds aurrendered; $4 \%$ Bonda ineo 4\% War Loan 1989-43 [13] at the rate of \&ioo War Lonn for each Eroo somimal valie Netional War bondo murrendered.
 compoe and repintered form; almo in rexietered coupom bonde.
Parable: 5\% Beade due in ipas al ros; due in 1924, It t03; due in 1927, at ros. The 4\% Bondo are payable at per.
19. Scosis Sale oflered at per Aprll y, r91t to Sepe. 30, 2918. Total mien sbout Lags million. Termeme arm meries Payable: $5 \%$ Bonde due in 1923 at 10s; in loag, at tos; ie spas, at 105 . $4 \%$ Boado payable at par.
34. Thri Sorior-Totai mles about 440 million. Offered Sept. 30, r918. to Jan. 14; 5019: $5 \%$ bonde tet pes and $4 \%$ bonde at 4 rot $\mathbf{z o n}$ Payable: $5 \%$ bonds due Eepe. 1. spas at 104. Sepe 8, loas at 103. Sept. 1, 1938 at 105; $4 \%$ bonde due Sept z, spal as noo. Other ierms and conditiona, eame an firte terice.
17. Fouth Salom-Totel mata about 5906 million. Offered Jan 31, 1010 to May 31.
 et 10a. Feb. 1. 1980 nt $105: 4 \%$ bonds Feb. z, 1939 at 100 . Terme and conditions

18. 4\% Pumbin Lown-OHghal trove about 4409 million. Oftered at so June ya to Juby 18.191 Stating Fund of $3 \times \%$ on the nominal amount of the loan of pinally crested et adide emblemnually and any bahnce remaining after payment A intersit epplied to the purchaer and ennceliation of bonde if obtaineble at or ender pror. Soe ifem 34 . Receivable oe the bade of 50 in peyment of death dutnes if held by the deomand for dir months prtor to death. Exempt from taxation In the bande of permoan either donaiciled mor ardinarily reaident in the United Kingdom. The Interen (dividemds) on bonds held by perione not ordinmerily remident is the Uevited Kingdom will be pald free of tar without regard to domicile of ownes. Coupon ased reginterad (either inecribed atoct or regietered certificate).

 July Es. 1919. Bonds are emitled to the benefit of Sinking Fund of $21 / \% \%$ of the monimal amovint of boeds orgimally creted. See ftem 34. Tax exemptions © is (18). Receivable tet 100 on mane base as (18) Is payment of denth duties. After gayment of interote, the batance of the fund fo applied to the redemption of boods by iot en Sept. I of ench year. See liem 14 Tax exemption es in (I8). Receiveble at 100 on amp basis es (is) is payment of death duties. Bearor aed retimered Boode, but taterett in all cone payabie by menes of Coupon aureched to boods.
 there are ina aeries of thete boeds outetanding; the 6 ve serien described in the sable and the meveries deacribed on page 33. The bonde of all imuer mare pay-
 \&8000 encept thefe are 008200 bocde in the $3 \%$ inve of Jes 18, 1930. The Ey
chequer Bonds may be registered either as inscribed stock or registered certificate. The $5 \%$ issue of 1920 and the $5 s$ of 1922 are receivable in payment of death duties, the $5 s$ of 1922 will also be received in payment of excess profit duties and munitions exchequer payments on the same conditions as those attached to the National War Bonds. The holders of $5 \% \%$ issue due 1925 may give notice during the month of Jan. in either of the years 1921, 1922 or 1923 requiring repayment of the bonds at par on the rst of Feb. in the year next suceeding that in which such notice is given. Under no circumstances may notice once given be subsequently withdrawn. Tax provisions all issues, except the last, concerning which there appeara to be no eremption, same as item (18).
21. Treasury Bills:-On April 14, 1955, a scheme was put into operation under which the Bank of England was prepared to receive applications daily for Treasury bills to mature at various dates up to twelve months after date of issue, but the sale of such bills was suspended on Jan. 3, 1917. On March 30, 1917, the sale of bills by tender was resumed, but the last issue under this system was made on June 15. 1917, and was repaid June 15, 1918, while on June 18, 1917, the method of daily sales at fixed rates was reverted to, and was continued until May 30, 1919, when sales were suspended for some weeks. On July 15, 1919, bills were again placed on sale and are now (May, 1920) issued with a currency of three months. See also pages 98 and 226 and Index.
22. War Saving Certificates:-The issue of these Certificates was commenced Feb., 1916, at the rate of $15 s$ 6d. for every fi certificate, repayable at par free of income tax in 5 years from dates of issue. See also page 25.
23. Other Capital Liabilities:-These comprise sundry liabilities under the Telegraph and Telephone acts, Public Works acts, Military Works acts, and several similar acts.
24. Debt to the United States Governnent:-The British Finance Accounts do not give details in regard to this indebtedness. The report of the Secretary of Treasury of the United States presented to Congress on Nov. 20, 1919 states that the total advances of the British Government to Nov. 15, 1920 aggregated \$4,277,000,000 . A letter of the Secretary of the Treasury to the Senate dated March 13. 1920 indicates repayments of $\$ 64,164,000$. The accrued unpaid interest to March 10 was reported to be $\$ 215,828,890$.
25. Anglo-French Loan:-This Loan for $\$ 500,000,000$ offered in New York, Oct. I 4 1915 at 98. It is a joint and several obligation of the Governments of the United Kingdom of Great Britain and Ireland, and the French Republic. Principal and interest are payable in New York City, in United States gold coin without deduction for any present or future British or French taxes. Coupon Bonds in denominations of $\$ 100, \$ 500$ and $\$ 1,000$ may be registered as to principal Registered Bonds in denominations of $\$ 1,000 \$ 10,000$ and $\$ 50,000$ and authorized multiples. Coupon and registered bonds interchangeable. Convertible at the option of the holder on any date not later than April 15, 1920 or (provided that notice be given not later than April 15, 1920) at maturity par for par into 14-25 year joint and several $43 / 2 \%$ bonds of the Governments of the United Kingdom of Great Britain and Ireland and the French Republic.: Such $41 / 2 \%$ bonds will be payable principal and interest in United States gold coin in New York City free from deduction for any present or future British or French taxes. They will mature Oct. I5. 1940. but will be redeemable at par and accrued interest in whole or in part on any interest date not earlier than Oct. 15, 1930 upon 3 months notice.
Secured Dollar Notrs:-Part of an original issue of $\$ 150,000,000$ made in New York Nov. 1, 1916, principal and interest payable in New York in United States gold coin or at the option of the holder in London in sterling at the fixed rate of $\$ 4.865$ to the pound. Free of any British taxes present or future. Redeemable on 30 days notice from Nov. 1, 1919 to Oct. 31, 1920 at 102, and interest and from Nov. I , 1920 to Oct. 3I, I921 at 10 I and interest. Secured by pledge with the Guaranty Truse Compeny of New York of securities approved by Messra. J. P. Morgan \& Co. having a market vaiue of $20 \%$ over the par value of the notes outstanding. The Government may sell the collateral at any time and apply the proceeds of sale to the retirement of the notes by purchase or redemption by lot.
07. 3-Year Cowvertimit Notws,Imued in New Yorit, Oct. 23. 1919 at 98 and incercet. Offered in conjunction with 10 year convertible bonde (28) $8250,000,000$ in all. Demomimatione 8100, 8500, and 5s.000. Intereat and principal payable in New Yort in United state gold coin. Without deduction for any British taxed promen or future. Convertible at the option of the holder at par and interest into National War $5 \%$ Boade fourth eeriea (17), eterling exchange being computed for the purpore of converaiom at the fixed rate of 84.30 to the pound. Converaion eay be made at any time prior to Nov. 2t. 1932, motice to be given prior to Sept. I. 1931. of incention to convert. The converting note holder will be entitied to
 primedgal a monnt notce wurrendered.
31. 3o-YEan Convertime Golo Bondes-Ofered in New York with (27) Oct. 23, 1919. at poly and insereve. Principal and Interet payable in New Yort In United Staces sold coin, free of any British taves prement or future. Coupon bonds in demomination of $5100,8500,51.000$, reziotered te to principal. Convertible at asy time prior to Feb. 1. 2939. For term and condition eee above, No. 26.
29. 20-Yeat Cols Bonos:-lmued Feb. 1, 1010 in emehange for a year mecured notes of the United Kingdom which matured on that date. Principal and Intereat perable in New Yort, in United States eold coin or in London at the fired rate of 44.ess, frae of Brisioh tames, prevent of future. Demominations, coupon bonds. $\$ 100$. \$500 and $\$ 1,000$, principal regiaterable. Registered bonda $\$ 1,000, \$ 5,000$ and siowoo, coupoim and regietered bonds interchangenble.
20. Ormer Degt Ceratmo umpa War Lonm Act:-Other debt la taken to include all borrowing outaide thic country, with the enception of the first American Lom mined in November, iois, under the American Loan Act". IThe AagloFronch sol (Bromomand, Apr. 3. 1030). In the table the emount due in and to the Unded Statee man bera ereremited with the poteible eaception of around \&iz million due for Tremery Bille mold is New York. Of che eum remaining the Mowthly Rown lor March, sozo. of the London Joint City E Midiand Bank eatimatem approaimately $厶_{1}$ so million to be due to cther foreigen countrieo-includiag Argentime, Unutuay, fapman and ofhes meutrala; the belance probably represents amounti due te ith Doraiaiong
18. Graws Topal oo Dremet Dest:-The authorlty for thle total and for corne of

18. Guanawriep Loame-Aay labillty In cosaection with theme lonne is appareatly semote at all the foretgis lomet are charge upon certain revenues of the ationa whom hoade mre guaranteed. The local loans are eecured by the easete of the Local Loen Fusde Fhich are eupported by local tamtion. Ine Iriah Land Purchove Boode are eocured by the licich Land Purchare Funda.

## TRANSFER REGULATIONS

 Irriand met as fical and trameter agente for the Brtish Government debe. Troma/er.- Tranafer of Covermment mecuritise can be made without charge from the boote of the Bank of Eagland to the boolte of the Bant of Ireand or vice rersa. Tranafer diave, Mondiny to Firiday, incluaive, fres of charye; Saturday upon the payment of a de of acd.
Seocley (Redoterved boada. Amertcan parinnce) are traneferred in multipien of a pemay (a) on the booke of tbe Bank, in which cave the owner has no documenetary evidence of ownerahip (eueh exack is known as Inecribed etock) or (b) by deed is which ones the owner receive a certificate by the Bank of England in the following form: "Thie in to Certify that (blank) is the reaitered proprietor of (blank amouns) menithered (here followe the title of the Loen)". Bearer Couspoa Boode are obeainable in enchange for inacribed atock or ecock traneferred by deed. in the cape of mont leves. Reqiotered Coupon Bonds are lanued in the -are demonimatioas as Bearer Bonda A Certificate of ownermip eimilas to (b) above to ismird to which Coupone for Intereft are attached. Each Regitered Congras Boed is tranderable by deed but ealy in ite encire emonnt.

Dividends:-Cheques for dividends on inscribed and registered stocks are mailed to the owner.
All business in regard to transfers must be conducted at the Bank of England or the Bank of Ireland in person or through a banker or other agent. The banks will not canry out any of these operations by correspondence.

## SINKING AND DEPRECIATION FUNDS

34. Sinking Funds:-Old Sinking Fund (38 and 39 Vict.) consisting of the surplus, if any, of income over expenditure for any year, of which the Treasury in the course of the next financial year shall cause to be issued out of the Consolidated Fund, or the growing produce thereof, at such times during that year as they may from time to time direct. The Old Sinking Fund is to be issued to the National Debt Commissioners and applied by them in the same manner as the New Sinking Fund, except that it may be employed in paying off advances made by the Bank of England or the Bank of Ireland in pursuance of Section 12 of the Exchequer and AuditAct, 1866, but not in paying of any loan borrowed under any Act to meet ways and means.
New Sinking Fund ( 38 and 39 Vict.) consisting of such portion of the permanent annual charge for the National Debt as is in any financial year not required for the purpose of paying the annual charges. This is to be issued from time to time to the National Debt Commissioners and be applied by them, within six months after the date of issue thereof, in purchasing, redeeming, or paying off any one or more of the following descriptions of debt-namely, Annuities (perpetual or terminable) charged on the Consolidated Fund, and Exchequer Bonds and Exchequer Bills (whether held by the public or on account of the Exchequer, or sent into the Bank of England for payment); but the New Sinking Fund is not to be applied in paying off any advances made by the Bank of England or the Bank of Ireland in pursuance of Section 12 of the Exchequer and Audit Act. 1866 , or in payipg off any loan borrowed under any Act to meet ways and means. (See Application of Sinking Funds, below).
An Annuity of $\mathbf{E 1 5} 547$ created under the National Debt (Conversion of Stock) Act, 1884, to extinguish the increase in the nominal capital amount of the National Debt due to conversion of 3 per cent. Stock into $23 / / 2$ and $21 / 2$ per cent. stock, and expiring in 1934 -
Application of Sinking Funds. The Finance Act, 1915, makes Sections 3 and 4 of the Sinking Fund Act. 1875 (which relate to the application of the Oid and New Sinking Funds), applicable to any securities issued under the War Loan Act. 1914, or any Act extending or amending that Act or any other enactment authorizing money to be borrowed for the purpose of the present war in like manner as they apply to annuities charged on the Consolidated Fund.
Depreciation Fund for $4 \%$ and $5 \%$ War Loans. (Items 12 and 13.). The follow lowing regulations have been made by the Treasury respecting the Depreciation Fund for 4 per cent. and 5 per cent. War Loan. Under Section 32 of the Finance Act, 1917:- (1) There shall be established a fund to be known as the "Depreciation Fund," under the control of the National Debt Commissioners. (2) The following sums shall be paid to the fund from time to time under the direction of the Treasury: (a) In respect of the six months from 17th February, 1917, to 16th August, 19r7, an amount equal to sir-eights of $r$ per cent. of the total nominal value of the Stock and Bonds of the 4 per cent. War Loan, 1929-1942 and the 5 per cent War Loan, 1929-1947: originally created; (b) in respect of each succeeding month an amount equal to oneeighth of I per cent of the total nominal value of the said Stock and Bonds; provided that no payment ahail be made to the fund in respect of any period during which the unexpended balance of the fund amounta to $£ 10,000,000$. (3) The moneys standing to the credit of the Depreciation Fund shall be applied from time to time by the National Debt Commissioners in the purchase of Stack or Bonds of 4 per cent. War Loan, 1929-1942, or 5 per cent. War Loan, 1929-1947, whenever the market price of the Stock and Bonds of these issues is below the respective issue prices-viz., Eroo and fos. (4) The Stock and Bonds bought on behalf of the Depreciation Fund shall be cancelled in the same manner as Stock or Bonds bought for the Old and New Sinking Funda (s) The

National Debe Commionomert shall, out of moneyt standing to the credit of the Depreciation Fund, parchace for that fund any Stock or Bonde of the 4 per cent. Wiar Loas. 1989-1048, or the 5 per cent. War Loan, 1929-1947, purchased out of funde ctanding to the credit of any Government Account between the rith February. 1917, and the pandin of the Finance Act. 1917. In anticipation of the extablithgent of the Decprociation Fund. (6) Any mume atanding to the credit of the fund, asd mot required for the immedinte purchare of much Stock or Bonds as aforemaid, nay be lavented by the National bebt Commisaioner in Treapury Billa, or in edvencet to the Treaury of tume which the Treagury may borrow for the purpooe of reving emy tum which they are authorised to letue out of the Consolidated Fund under any Consolidated Fund Act or Appropriation Act. (Up to the 15 th March, 1919, the amount taved out of the Erchequer for the Depreciation Fund wea Coa.1to.siz.)
SinNmi Fand for $4 \%$ Fumdinf Laen and Victory Boads. (Items 18 and rg). His Majetry't Goverment ypdertake to ent mide at the close of each half-yearis oum oqual to sh per cent. on the motrinal smount of the Loan and Bonde originally crented. Aler deducting therefrom the amount required for payment of interest on the Loas for the hall year, the belance of the num 00 et atide will be carried to - Sinking Fund which will be noplited as follown:

In the case of the Panding Loan; during the mucceeding balf-year to the purchace of the Loas for eanceliation if the price la at of under par; when the price is above par it mill be either 0 applised or otherwiee invenced under the control of His Matety'e Treacury. Any outmanding balance of the Loan not previoualy rodermed will be repeld et par on May 1, 1090, but Hie Majenty's Government tewerve to themelve the right, of giving three calender monthe notice in the Lomdon Geatic, to redeen of per et any time on or efter May 1, any outatandIng balance of the Loan aok greviotuly purchaned and anncelled by the operation of the Sinting Furd.
In the case of the Victory Booda; by anmual drawings to the redemption of the Boode it par (including Bompa whlch have been rurrendered to the Commigeioners of Inland Revenue for death dutien at hereinafter provided), the Bonde to be nudeemed ts each year determined by bot and paid ofl on September in euch 7ene in mecordance with serulations gade by the Treseury. The numbers of the Bonde drama tor redemption os ench occasion will be advertieed in the Lomdon Goantio rot iera than two montha prior to the date of redemption. Intereat on Fionds drewn for regatyment will cenen from the date on which the Bonds beoome rpayable. The faret drewing will be that for the Bonde to be redeemed on Eeptermber 3. 39as

## AUTHORITIES

The coursea frean which the ebove rables and motes have been complled are Finance Acrownte fot 8919. the Seock Eschange (Landon) Daily Official Liet, official ctrcuiare mo for ed obtainable, the Stoch Exchange O ficial Imelligence, vol. 38 -for sqsa TMEspmpmise and The Bowbers Macaine (London).

## QUOTATIONS Consols and Bank of England Stock 1697-1919

For ciosing years of historical periods and yearly from 1857.

| Year | Consols |  |  |  |  |  | Bani of England $\qquad$ <br> Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Price |  |  |  | Average (k) Yield |  |  |  |
|  | High | Month | Low | Month | Price | $\%$ | High | Low |
| 1697 | (a) 97 |  | 79 |  | (e) 88.0 | 5.7 | (1) 98 | 51/6 |
| 1701 | (a) 79 |  | 57 |  | (e) 68.0 | 7.3 | (1) 123 | 1031/2 |
| 1714 | (a) 9334 |  | 783/4 |  | (e) 86.2 | 5.8 | (m) $133 \%$ | 1161/2 |
| 1739 | (b) 105 | Jan. | 97 | Nov. | (f) 101.9 | 3.3 | (n) 144 | 134 |
| 1749 | roz | Oct. | 91 | Feb. | 97.6 | 3.1 | 140 | 127 |
| 1755 | IOI | Jan. | 90 | Oct. | 94.5 | 3.2 | 131 | 120 |
| 1766 | 90 | Jan. | 87 | Feb. | 88.5 | $3.4{ }^{\circ}$ | 140 | 134 |
| 1775 | 90 | Jan. | 87 | July | 89.6 | 3.3 | 146 | 146 |
| 1785 | 75 | Dec. | 55 | Feb. | 59.7 | 5.0 | 130 | II2 |
| 1792 | (c) 96 | Mar. | 76 | Dec. | (g) 90.0 | (g) 3.3 | 216 | 175 |
| 1802 | 76 | Apr. | 68 | Jan. | 70.9 | 4.2 | 195 | 180 |
| 1817 | 841/ | Dec | 62 | Jan. | 75.3 | 4.0 | (0) 294 | 220 |
| 1833 | 9x\% | June | 841/4 | Jan. | (h) 87.7 | 3.4 | 2131/2 | 190 |
| 1842 | 9736 | Dec. | $881 / 2$ | Jan. | (i) 92.0 | 3.3 | 173 | 165 |
| 1847 | 93\% | Jan. | 783/4 | Oct. | 87.2 | 3.4 | 2061/2 | 180 |
| 1854 | 957/8 | Sept. | 851/8 | Mar. | (j) 91.9 | 3.3 | 221 | 2041/1 |
| 1857 | 941/4 | Jan. | 861/2 | Oct. | 91.9 | 3.3 | 222 | 209 |
| 1858 | 9856 | Oct. | 941/8 | Jan. | 96.9 | 3.1 | 230 | 217 |
| 1859 | 9736 | Dec. | 883/4 | Apr. | 95.1 | 3.1 | 231 | 215 |
| 1860 | 951/8 | Jan. | 921/4 | Oct. | 94.0 | 3.2 | 2351/2 | 225 |
| 1861 | 941/4 | Nov. | 891/8 | July | 91.5 | 3.3 | 245 | 23619 |
| 1862 | 943 | July | 9137 | Jan. | 93.0 | 3.2 | (p)244 | $2321 / 2$ |
| 1863 | 94 | May | 90 | Dec. | 92.6 | 3.2 | 240 | 232 |
| 1864 | 92 | May | 873/8 | Sept. | 90.1 | 3.3 | 244 | 234 |
| 1865 | 911/2 | June | 863/4 | Dec. | 89.5 | 3.3 | 250 | 238\% |
| 1866 | 901/3 | Dec. | 845/8 | May | 88.0 | 3.4 | 253 | 240 |
| 1867 | 9636 | June | 897/3 | Apr. | 93.0 | 3.2 | 264 | 239 |
| 1868 | 9616 | May | 913/4 | Jan. | 93.9 | 3.2 | 251 | 240 |
| 1869 | 941 | June | 913/4 | May | 92.9 | 3.3 | 246 | 235 |
| 1870 | 9456 | May | 883/2 | Aug. | 92.5 | 3.3 |  |  |
| 187x | 94 | July | 918/8 | Dec. | 92.7 | 3.3 |  |  |
| 1872 | 93\% | May | 913/2 | Dec. | 92.5 | 3.3 |  |  |
| 1873 | 94 | May | 913/4 | Dec. | 92.5 | 3.3 |  |  |
| 1874 | 93588 | May | 913/1 | Dec. | 92.5 | 3.3 | (r) 261 | 2493/3 |
| 1875 | 95\% | Nov. | 917/8 | Jan. | 93.7 | 3.2 | 262 | 251 |

QUOTATIONS-Continued
Consols and Bank of England Stock
1697-1919
Fow chooing yetr of hiterical periode and yearly from 1857.

| Year | Consols |  |  |  |  |  | $\frac{\text { Bune os England }}{\text { Priot }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Price |  |  |  | Average (k) Yield |  |  |  |
|  | High | Moneh: | Low | Month | Price | \% | High | Low |
| 2976 | 974 | July | 933 | Dec | 95.0 | 3.2 | 260 | 248 |
| 1477 | 07\% | Nov. | 03 | May | 93.4 | 3.1 | 267 | 255 |
| 1874 | 01 | Juan | 93\% | Oct. | 95.2 | 3.1 | 263 | 249 |
| 1879 | 094, | April | 9414 | Jan | 97.5 | 3.1 | 271 | 249 |
| 1880 | 200\% | Nov. | 97\% | Sept. | 98.4 | 3.0 | 280 | 269 |
| TEst | 803 | May | 934 | Jans. | 200.0 | 3.0 | 299 | 278 |
| 1883 | 1034 | May | 09 | Jan | 100.3 | 3.0 | 898 | 284 |
| 1883 | 102\% | Feb | 90\% | July | 502.4 | 2.9 | 302 | 288 |
| 1884 | 203) | Apr. | 983 | Dec. | 802.0\% | 2.9 | 312 | 294 |
| I885 | 1024 | Mav | 944 | Apr. | 99.3 | 3.0 | 309 | 2891/4 |
| 5180 | 203\% | Nov. | 004 | Jas. | 200.8 | 3.0 | 290 | 295 |
| 1837 | $203 \%$ | May | 003 | Feb. | 102.8 | 8.9 | 30814 | 294 |
| 1888 | 303\% | Mar. | 984 | Dec. | 108.0 | 4.9 | 332 | 303 |
| 1860 | 004 | Jan | 064 | Seph | 96.0 | 0.8 | 346 | 320 |
| 1890 | 985 | May | 034 | Nov. | 96.3 | 3.8 | 3401/9 | 327 |
| 16 mz | 973 | Jan. | 044 | June | -95.7 | 8.9 | 343 | 333 |
| 1 log | 063 | Dee | 934 | Jos. | 96.7 | 3.8 | 344 | 125 |
| 1803 | 014 | Juna | 0314 | Sept | 94. 5 | 1. 8 | 344 | 327 |
| 189 | sosk | Dec. | 974 | Jara. | 208. 1 | 8.7 | (0) 343 | 335 |
| 1 cos | 203 5 | Bept | 8031/ | Jan | 106. 1 | 2.6 | $3381 / 2$ | 322 |
| 1006 | 213\% | July | 105 4 | Jan | 110.7 | 2.5 | 336 | 321 |
| 1897 | 1134 | May | troy | Mar. | 128.4 | 0.4 | 338 | 325 |
| ting | 1834 | Jan | 3064 | Oct | 110.9 | 3.5 | 351发 | 336 |
| 3 lcos | 1714 | Jat. | 97* | Dec. | 106.9 | 9.6 | (r) 36114 | 325 |
| 1900 | rosk | June | 964 | Dee. | 99.6 | 0.1 | 349 | 326 |
| 1908 | 074 | Feb | 98 | July | 94.3 | 8.9 | 149 | 320 |
| 8908 | 014 | Junt | 024 | Dec. | 94.4 | 1.9 | 31815 | 32314 |
| 1001 | $03^{16} 4$ | Apr. | 66\% | Apr. | 90.7 | 8.1 | 13142 | 312 |
| 8904 | (d) 014 | Jum | es | Mar. | 88.2 | 3.8 | 316 | 2951 |
| spos | $98^{11} \cdot m$ | Mer. | 674 | Jas. | 89.8 | 3.8 | 308 | 3914/4 |
| 2006 | 913 | Apr. | B5\% | Oct | 5.3 | 9. 8 | 308 | 268 |
| 1007 | 77* | Peb. | cos | Aus | 4. 4 | 8.9 | 288154 | 358 |
| 100\% | 084 | Mar. | 83\% | Dee | 86.1 | 2.9 | (t) 285 | 2585 |
| 1900 | 36 | Apr. | 8314 | Oct. | 4.0 | 3.0 | 179 | 256 |
| 1070 | 834 | Jan. | 784 | Dee. | E1.0] | 3.1 | 278 | 250 |

## QUOTATIONS-Continued Consols and Bank of England Stock 1697-r919

For closing years of historical periods and yearly from 1857.

| Year | Consols |  |  |  |  |  | $\frac{\text { Bank or England }}{\text { Ptice }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Price |  |  |  | Average (k) Yield |  |  |  |
|  | High | Month | Low | Month | Price | \% | High | Low |
| 1911 | $823 / 16$ | April | 768/8 | Sept. | (i) 79.3 | 3.1 | 2631/4 | 2421/2 |
| 1912 | 7972 | Feb. | 721/2 | Oct. | 76.1 | 3.3 | 251 | 234 |
| 1913 | 75\% | Mar. | 71 | Dec. | $73^{21 / 6}$ | 3.4 | 251 | 224312 |
| 1914 | $77^{11} 16$ | Feb. | 6914.4 | July | $74^{27} / 2$ | 3.3 | 256 | 234 |
| 1915 | 685/8 | Jan. | 57 | Nov. | 65.5 | 4.1 | 2498/4 | 230 |
| 1916 | 618/4 | June | 53\% $/ 4$ | Dec. | 58.0 | 5.2 | 2301/4 | 1941/2 |
| 1917 | 56\% 8 | Oct. | 51 | Feb. | (e) 54.0 | 4.6 | 205 | 190 |
| 1918 | $631 / 4$ | Oct. | 531/2 | Mar. | 58.2 | 4.3 | 226 | 191\%/4 |
| r9r9 | 60 | Jan. | 497/8 | Sept. | 55.0 | 4.5 | (u) 3241/4\| | 1861/ |

(a) These quotations are not for Government Stock but for the stock of the "Million Bank," an investment trust whose funds were invested in Government stocks. The quotations probably give a better idea of the true market than would quotatations for Government annuities. The first quotation is for 1700 , the first year in which the Million Bank stock was quoted. The dividends paid by the Million Bank in these years were at the rate of 5\%. Scott, W. R., Vol. II, See Authorities.
(b) (1739-1785) Rogers, J. E. T. "History or Agriculture and Prices" Vol. VII., Part II.
(c) (1792-1903) Mabson-" The Statist's History of the Public Debt."
(d) (Igo4-1919) Investors' Monthly Manual.
(e) Average of high and low only.
(f) (1739-1785) Average of daily prices as recorded in Rogers, J. E. T. "History of Agriculture and Prices" Vol. VII., Part II.
(g) (I792-1817) Average of the mean of the monthly high and low prices. Silberling. N. J. in Harvard Review of Economic Statistics, Oct. 1919.
(h) Van Sommers, James. Tables, London, 1848.
(i) (1842-1847)(191I-I916) Statistical Abstract for United Kingdom Average monthly price.
(j) ( 1854 -1910) Average and yield. Williams, T. T. "Journal of Royal Statistical Society," March, 1912.
(k) Except where otherwise noted the yield is obtained by dividing the average yearly price into the rate of interest. This rate was $3 \%$ from 1739 to April 5, I889, then $25 \%$ to April 6. 1903 and since then $21 / 2 \%$.
(l) (x697-I70x) Scott. W. R., Vol. II. See Authorities.
(m) (17I4) Rogers, J. E. $\dot{T}$. "History of Agriculture and Prices" Vol. VII., Part II.
(n) (1739-1802) Sinclair Vol. II. See Authorities.
(o) (r817-186I) Francis, John-History of Bank of England-'Its Times and Traditions."
(p) ( 1862 -1869) Thom's Irish Almanac and Official Directory of the United Kingdom of Great Britain and Ireland.
(r) ( 1874 -1893) ( $1890-1907$ ) Investors' Monthly Manual.
(8) (1894-1898) Stock Exchange Official Intelligence.
(t) (1908-1918) Mathieson's Hand-Book for Investors, 1919.
(u) (io19) Investora' Monthly Manual.
(v) High and low prices. The montha given for the high and low prices of the year are those in which the price first occurred. In some years these same prices were reached several times.

## QUOTATIONS LONDON STOCK EXCHANGE

British Funds


## QUOTATIONS LONDON STOCK EXCHANGE (Continued)

British Funds

| Calendar Years |  | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1988 | 1919 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name Second Series |  |  |  |  |  |  |  |  |  |  |  |
| 5\% (Apr., Oct.), Apr., | H |  |  |  |  |  |  |  |  |  | 1005/8 |
| 1923. . . . . | L |  |  |  |  |  |  |  |  |  | 96 |
| 5\% (Apr., Oct.), Apr., | H |  |  |  |  |  |  |  |  |  | 1003/4 |
| 1925. . . . . . | L |  |  |  |  |  |  |  |  |  | 961/4 |
| 5\% (Apr., Oct.), Apr., | H |  |  |  |  |  |  |  |  |  | 1001/2 |
| 1928...... | L |  |  |  |  |  |  |  |  |  | 951/2 |
| 4\% (Apr., Oct.), Apr. | H |  |  |  |  |  |  |  |  |  | 1003/ |
| 1928. Third Series | L |  |  |  |  |  |  |  |  |  | 9754 |
| 5\% (Mar., Sept.), Sept., | H |  |  |  |  |  |  |  |  |  | 1001/2 |
| 1923. . . . . | L |  |  |  |  |  |  |  |  |  | 957/8 |
| 5\% (Mar, Sept.), Sept., | H |  |  |  |  |  |  |  |  |  | 100\$6 |
| 1925. . . . . . | L |  |  |  |  |  |  |  |  |  | 961/2 |
| 5\% (Mar., Sept.), Sept., | H |  |  |  |  |  |  |  |  |  | 1001/4 |
| 1928. . . . . . | L |  |  |  |  |  |  |  |  |  | 953/4 |
| 4\% (Mar., Sept.), Sept. | H |  |  |  |  |  |  |  |  |  | 10078 |
| 1928. . . . . . | L |  |  |  |  |  |  |  |  |  | 97362 |
| - Fourth Serics |  |  |  |  |  |  |  |  |  |  |  |
| 5\% (Feb., Aug.), Feb., | H |  |  |  |  |  |  |  |  |  | 100夏 |
| 1924. . . . . . - | L |  |  |  |  |  |  |  |  |  | 951/2 |
| 5\% (Feb., Aug.), Feb., | H |  |  |  |  |  |  |  |  |  | 1003/4 |
| 1929. - | L |  |  |  |  |  |  |  |  |  | 971/4 |
| 4\% (Feb., Aug.), Feb., | H |  |  |  |  |  |  |  |  |  | 10014 |
| 1929. . . . . . | $L$ |  |  |  |  |  |  |  |  |  | 97 |
| Exchequer Bonds |  |  |  |  |  |  |  |  |  |  |  |
| 3\% Jan., 1930. (Int. | H |  |  |  |  |  |  |  |  | 83 | 8353 |
| Jan., Apr., Jul., Oct.) | L |  |  |  |  |  |  |  |  | $79^{13} / 6$ | 795/6 |
| $3 \% \mathrm{Jan}. \mathrm{1930}. \mathrm{(Int}$. | H |  |  |  |  |  |  |  |  | 83 | 83 |
| Jan., July) . . . . . | L |  |  |  |  |  |  |  |  | $81^{31}$ 年 | 78 |
| 5\% Dec., 1920. (June. | H |  |  |  |  |  |  |  |  | 100\% | 1013/8 |
| Dec.) . . . . . . | L |  |  |  |  |  |  |  |  | 99 | 98 |
| 5\% Oct., 1921. (Int. | H |  |  |  |  |  |  |  |  | 100\%88 | 100\% |
| Apr., Oct.) . . | L |  |  |  |  |  |  |  |  | 99\%4 | 971/14 |
| 5\% 1919-22, Apr., 1922. | H |  |  |  |  |  |  |  |  | 101 | 10058 |
| (Apr., Oct.) . | L |  |  |  |  |  |  |  |  | 99\%4 | 964 |
| 6\% Feb., 1920. (Feb., | H |  |  |  |  |  |  |  |  | 1021/8 | 10158 |
| Aug.) . . . . . . . | L |  |  |  |  |  |  |  |  | 100588 | 99\% |
|  |  |  |  |  |  |  |  |  |  |  |  |

## 〕UOTATIONS LONDON STOCK EXCHANGE（Continued）

British Funds

| Caleader Yeary Name |  | 1910 | 1011 | 2918 | 1923 | 1914 | 1925 | 1916 | 2917 | 1918 | 1919 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K\％Gemrateed， 8013 |  |  |  |  |  |  |  |  |  |  |  |
| （maced ueder Iriah | H | 445 | 44．6 | 70\％ | 761／4 | 7923 | 67\％ | 65\％ | 56 | 63 | 58\％ |
| Lavd Act）．（Int．Jan， | $L$ | 7914／6 | 76\％ | 73 | 60\％ | 69 | 65\％ | 50\％4 | 58 | 5314 | 513／3 |
| July）．．．．．．． |  |  |  | \％ | 76\％ | 2／4 | $683 / 3$ |  | 71 | 3124 | 63 |
| （ImR．，Jan．July） | 1 | 79 K | $76 \%$ | 14\％ | 70\％／1 | 72K | 66\％ | 5314． | 55 | 561／3 | 53\％ |
| \％Gramateed，red．，${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |
| Dec．， 1939 （Ime．Jan． | H | ${ }^{03}$ | 9256 | 56\％ | 82\％ | 86\％ | 74\％ | 7153 | 6196 | 67 | 64 |
| July）．．．． | 1 | 4 | 33\％ | 7914 | 73\％ | 74 | 71 | 54红 | 55 | 5714 | 541\％ |
| \％Lacel Loame， 1912. <br> （1ne．Jan．Ape．，July． |  |  |  |  |  |  |  | 784 |  | 66\％ | 4 |
| Ott．）．．．． | 1 | 03 H | 20\％ | 88 | $\mathrm{B}_{1}{ }^{1}$ | 814 | 78 | 57t |  |  | 5s／6 |
| \％Mer．Protce Det．， | H | 03 | 94h | 94\％ | ¢ 6 | 97 | 04Y／2 | 914． | 9314 | 974， | 90\％ |
| soga．（ler Jan．July） | 2 | 915． | 93114 | 92\％4 | 934 | 93 | 89 | 9142 | 90\％ | 94 | 98\％ |
| \％Etrypana Gua（lat． | H | $00^{4} 4$ | \％ | 03159 | Dots | 2536 | 00 | 715／6 | 60\％ | 725\％ | 73\％ |
| Mer．，Sept．） 1958 | 2 | 0．4 4 | 914 | ${ }^{8}$ | 88 | 8954 | 375s | 68 | 60\％ | ${ }^{6} 36$ |  |
| \％\％\％Greek Gua．Leans | H | 83\％ | 24\％ | 84 | 79\％4 | Sots | 75\％ | 751 | 75\％ | 80 | 84\％ |
| （Int．Apr．，Oct．）itot | $L$ | 83\％ | 88 | 7945 | 73\％ | 78 | 15 | 65 | 6012 | 74 | 79 |
| \％Mauntina， 1940. | H | 94 | 9134 | 875 | 87\％ | 92 |  | 73 |  | 71 | 60\％ |
| （lnt．Jan．，Juyr） | L | 915 | Sos | $87 \%$ | 1746 | －24 |  | 71 |  | 693 | 64\％ |
| 5\％\％Sudan Gore．Ged． | H |  |  |  |  |  |  |  |  |  | 74K |
| Bde（Int．May．Nov．） | L |  |  |  |  |  |  |  |  |  | 70\％ |
| \％Tramenal Gua |  |  |  |  |  |  |  |  |  |  |  |
| 1093－53 Mosey．（lat． | H | 9st． | －6\％ | 934 | 914 | 95 | $\infty$ | 88166 | 68 | 70\％ | 7316 |
| May．Nov．）．．．． | $L$ | 013， | cotia | 87\％ | 86\％ | 88\％ | 88 | 6，\％ | 63\％ | 6715 | 32 |
| \％Tramonal Gua，red． |  |  |  |  |  |  |  |  |  |  |  |
| －July．10ss．lat． | H | 9．4 ／$^{114}$ | 931420 | 9aty． | 91 | 94：5 | ¢ | 85 | 66 | 70 | 70 |
| Jan．July ．．． | 1 | 91\％ | 914． | $85 \%$ | 86\％ | $878:$ | 86 | 63 | 63 | 63\％ | 62 |
| \％Turkish Gum（Iat． | H | 20635 | 100 $\%$ | 104\％． | 108 L | 103 ${ }^{\text {\％}}$ |  | 97 | 70\％5 | 83 | 874 |
| Feb．Aus．） BE Ss | L | 10 | 102 6 | 101 | 90\％ | 10 |  | 75 | 72 | 71 | 74 |
| leak of Eaytand | H | 273 | ${ }^{263}$ | \％ | ast | 256 | 249 | 130\％ | 205 | 236 | 324X |
|  | L | 150 | 242 k | 34 | 224\％ | 34 | 230 | 194\％ | 190 | 10174 | 186\％ |
| Div．\％．Apr． 8 |  | － |  |  | － | 10 | 10 | 10 | 10 | 10 | 10 |
| Div．\％．Oce |  | － | － | － | $\bullet$ | 10 | 10 | 10 | 10 | 10 | 80 |
| leak of Ireland． | H | 114\％ | 303 | ators | 243 | 2401／3 | $230 \%$ | 300\％／4 | 193 | 233 | ${ }^{236}$ |
|  | $L$ | 293 | 126 | 240 | 215 | 2225 | 1833 | 172 | 770 | 190 | 204 |
| Div．\％．Feo |  | ［15\％ | 12 | 11 | 10 | 10 | 10 | 10 | 10 | 1 | 12 |
| Dtv．\％．Ang． |  | 12 | 88 | 10 | 10 | 80 | 10 | 10 | 10 | 10 | 12 |

## QUOTATIONS LONDON STOCK EXCHANGE (Continued)

## British Funds



AUTHORITIES FOR QUOTATIONS 19I0-1919, Investor's Monthly Manwal-London. Stock Exchanges London and Provincial Ten-Year Record of Prices and Dividends-1909-1918. Mathieson, Fred C. C. \& Sons, London, 1919. Mathiesos's Handbook for Investors for 1020.

## QUOTATIONS NEW YORK STOCK EXCHANGE

 British Funds| Calender Yeare Neme |  | 3014 | 2915 | 1926 | 1917 | 1983 | 2980 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \% \text { Anglo-Freach } \\ & 8 \text { rr. } \\ & \text { Int. Apr. iact Oct } \end{aligned}$ | H L |  | 984/ $937 / 6$ | 961/6 | 933 613 | 971/4 $88 \%$ | 97\% $95 \%$ |
| Uwich Eimedom of Croad Arrieive end |  |  |  |  |  |  |  |
| - 9r. 3\% Notem 1916. | H |  |  | 2011/6 | 98\% |  |  |
| (Ine. Mch. E Sepe.) | 1 |  |  | 98 | 9531 |  |  |
| 3 5. 3K\% Nota |  |  |  |  |  |  |  |
| ${ }^{1019}$ M . . . | ${ }^{1}$ |  |  | 98\% | 987\% | 100 |  |
| (1at May Nov.) | L |  |  | 97\% | 93\% | 95K | ...... |
| 8 \%r. 34\% Notes |  |  |  |  |  |  |  |
| 1911. . . . . | H |  |  | 0836 | 9514 | 903/1 | 9034 |
| (Int May E Nov.) | 2 |  |  | 97 | 34\% | 915 | 04\% |
| 54\% Cooveruble |  |  |  |  |  |  |  |
| Notee | H |  |  |  | 100\% | ...... |  |
| 1918. | L |  |  |  | ${ }^{6}$ | ...... | . $\cdot$... |
| 84\% Converitle |  |  |  |  |  |  |  |
| Noted 2919 | ${ }_{\text {H }}$ |  |  |  | 1013 | 103 | ...... |
| (libe Fed ana.) <br> 34\% 90.5 r . Gold | 1 |  |  | ...... | 953 | 97\% | ..... |
| Bowd 1037 . . . | H |  |  |  |  | 1014 | 101\% |
| (lat. Fots a Aug.) | 1 |  |  |  |  | 100\% | 6615 |
| to yr. Coav. sh/s |  |  |  |  |  |  |  |
| 1099. . . . . . | H |  |  |  |  |  | 0615 |
| (lot. Feth il Aag.) | 1 |  |  |  |  |  | 244 |
| ifr. Conv. 53/4 1039. | H |  |  |  |  |  | 0834 |
| (Ime. Fels al Aug.) | 1 |  |  |  |  |  | 951/6 |



TREASURY BILLS
Discount Rate

| Date | Rate \% | Maturity |
| :---: | :---: | :---: |
| 1917 |  |  |
| June 19 | 43/4 | 3 and 6 months bills |
| $\begin{gathered} \text { Dec. } 27 \\ \text { 1918 } \end{gathered}$ | 4 |  |
| Feb. 14 1919 | 3514 | * * |
| May 3 I |  | Sales discontinued |
| July 14 | $33 / 8$ $31 / 2$ | $\qquad$ $3$ |
|  | 4 | 6 - |
| Oct. 6 | $41 / 2$ 5 | $\begin{aligned} & 3 \approx \\ & 6< \end{aligned}$ |
| Nov. 7 | 51/2 | 3 and 6 months bills. |

# SOVEREIGNS OF ENGLAND <br> From the Conquest 



## Authorities

The statements contained in this book are for the most part based upon official data, chiefly derived from the following publications:-

| Period | Revenue, Expenditure, Currency and Debt |
| :---: | :---: |
| 1688-1869 | House of Commons Sessional Papers, Vol. XXXV, 1868-69, No. 366. This monumental work of H. W. Chisholm gives complete data in regard to revenue and expenditure and the debt. |
| 1870-1919 | Finance Accounts. See page 161. |
| $\begin{aligned} & 1919 \text { and } \\ & 1920 \end{aligned}$ | Budget Speeches as printed in various publications; also semi-official data tabulated in The Economist and The Statist. |
| 1914-1919 | Committee on Currency and Foreign Exchanges After the War -Lord Cunliffe, Chairman. First Interim Report-C. 9182, 1918. Final Report-C. 464, 1919. |

The Debt
1694-1786 History of the Earlier Years of the Funded Debt. A. T. King. House of Commons Sessional Papers, 1898. Vol. 52C. 9010.

1786-1890 Proceedings of the Commissioners for the Reduction of the National Debt. House of Commons Sessional Papers, 189 g . Vol. 48-C. 6539.
1836-1914 National Debt. House of Commons Sessional Papers, 1914. Vol. 50-C. 7426. Similar statements are published annually.

## Revenue, Expenditure and Debt

of secondary sources the most valuable have been

Ashton, Joen-A History of English Lotteries. London, 1893. The best authority:
Atron, Henry and Henry Hurst Holland-The King's Customs. New York, 1908. Covers from earliest times to $\mathbf{8 8 0 0}$.
Bogart, Ernest L.-Direct and

Indirect Costs of the Great World War.
Carnegie Endowment for International Peace. New York, 1919
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[^0]:    Ifs maiktan thie eomparioons bowever we thoald oct lowe dotht of the fact that the purchaning power of the $I$ bterling may fucturated groaly during thit period and that, frequendy. particularly is the early yearm, a sivea cum would procure much more
    
    

[^1]:    $t$ Cagh in hand and at Bank of England

[^2]:    * England only.
    $\dagger$ England and Scotland.
    Items in Roman indicate increasea; in italice, decreaseo. year. It in not the actual payment for the year.

[^3]:    * Chieay the empease of the Royel family. epeoial pancione and axpenees of the higher courts.
    $\$$ Abnormaliy $1,394,000$ lor rond improvement. Thit wis the late year of the Boer war.

[^4]:    I la the provinoces.

[^5]:    iPart 1. Chegter V. and Chapter VI.

