dissenters. The dissenters seek to substitute new forms of union for the old, but as yet they have not sufficiently succeeded. The American democracy is in part timidly progressive, in part timidly reactionary and as a whole very much distracted. It needs the impulse and the bondage of a new faith —one which will place the old uniformity of conviction and homogeneity of feeling with a more consciously social ideal and a more efficient equipment both of political and industrial institutions. That social ideal must at least be authoritative and capable. It must create a political system in which such morally obscene incidents as the murder of Leo Frank will be impossible. Instead of paying hypocritical homage to a law which it did not intend to obey except when convenient, the future American democracy must above all be sincere and thorough-going. It cannot afford to place a pretender on a throne in order to have a plausible excuse for escaping now and then from his authority.

Germany's Financial Resources

ISAPPOINTED with the failure of either the central powers or the Allies to make gains promising a conclusive result, the prophets of peace are eagerly scanning the horizon for signs of the financial exhaustion of one party or the other. It appears to be taken for granted that the Allies can outlast the Germans in financial performance. Hence the intense interest in the question, how long will the German treasury hold out? To this interest must be ascribed the space given by the press to the patently apocryphal report of Dr. Helfferich's pessimistic views, and the socialist murmurings.

It is not difficult to prove that the German financial system is still quite solvent. At the outbreak of the war the debt of Germany, including both the Imperial and the state debts, was less than four and a half billion dollars. A very large proportion of this debt was covered by productive assets railways, telegraph systems, etc.—and is no more to be regarded as a financial burden than are railway stocks and bonds in private hands. A billion and a half is the maximum that can be allowed for the net debts of the German Imperial government and states. Add to this an issue of four billion dollars—a liberal estimate of the amount required to finance the war until January 1, 1916, and we have the huge sum of five and a half billions. England in 1815 bore up under a debt of £861,000,-000, or over \$4,200,000,000. The population of Great Britain and Ireland in 1815 was considerably less than one-third of that of the German Empire to-day, and the per capita income was probably at least one-third less than that of Germany. There are, to be sure, important points of dissimilarity between the economic situation of early nineteenth century England and that of Germany to-day. It cannot be affirmed dogmatically that Germany can bear so easily a debt of \$16,200,000,000 as England in 1815 bore her debt of \$4,200,000,000. But the burden of proof is upon those who will assert that Germany cannot stand the financial drain of a war continuing at an annual cost of three billion to four billion dollars until July, 1920.

Historical analogies are often deceptive; let us therefore approach the problem from another angle. It is a commonplace that the actual cost of a war is borne by current production, and that current production sets the ultimate limit of war-waste. So long as the civil population of Germany can feed and clothe itself and has energy enough left over to munition the armies, there is no fundamental economic limit to Germany's belligerency. The financial problem is merely one of adjusting the burden in such a way as not to break the spirit of the civil population and lame its productive activities. But for this psychological element a government might levy taxes at a rate sufficient to defray military expenses as they accrue. Such taxes would divert the surplus of production to military use, and nothing more can be effected by loans. In either case thrift is forced upon the civil population, but through the use of the loan a future reward is offered for present privation.

So long as a government is believed to be solvent the civil population can be induced to put forth its greatest productive efforts and exercise thrift in highest measure through adequate payment in the form of interest-bearing securities. When the solvency of a government is doubtful, such securities will not be accepted voluntarily. The government may force their acceptance, but in such case the line between the loan and the confiscatory tax disappears. Persistence beyond this point leads directly to forced labor and economic disintegration. Now, what we have to determine is, how far Germany is from such a condition. If we assume that the Allies do not succeed in breaking down the frontier defenses of Germany, thus casting doubt upon the very continuity of the Empire, the German civil population will look upon government securities as good tender until their volume becomes so vast that after the return of peace no workable system of taxation will afford revenues sufficient to cover necessary civil and military expenditures and meet the interest on the debt.

Before the outbreak of the war the private incomes of the German Empire amounted to approximately ten billion dollars. The war has no doubt reduced this figure somewhat, and a decade of peace will be required to make any material advance upon

it. The problem accordingly resolves itself into the following terms: How great a public revenue can be extorted from ten billions of private income, and how much of that revenue is required for purposes other than the service of the debt?

No modern state would find difficulty in levying taxes that take for public purposes fifteen per cent of the private income of its citizens. No state in the world's history has succeeded in taking so much as thirty per cent, and it is very doubtful that even German efficiency could extract a proportion approaching this limit. Apart from the productive revenues of the Imperial government and the states -against which we have already set an appropriate share of the public debt—two billion and a half may be regarded as the maximum amount that can be raised by Empire and states in time of peace. The inevitable current expenditures, civil and military will absorb a billion and more. With all due allowance for underestimation of such requirements and for overestimation of total revenues, we may safely claim a possible billion of revenues for the service of the debt. On a six per cent basis, a billion of revenue would provide for a debt principal of sixteen and two-thirds billions. Germany can by this reckoning carry on the war until the autumn of 1920 without becoming actually insolvent.

In this calculation no account has been taken of the fact that Austro-Hungarian financial solvency is not less essential than German to the central powers, and that the Dual Monarchy is far from being in so solid a position as that of Germany. On the other hand, the German bond-buyer firmly believes that upon the close of the war the boundaries of the Empire will be considerably extended, and that the number of tax-payers will be notably increased. This view may be mistaken, but so long as it persists it will continue to strengthen the psychological basis of the government credit.

It is not to be supposed that the German taxpayer will view with equanimity the steady mounting of the national debt toward its absolute limit of sixteen billion dollars. The desire for an honorable peace, already in evidence, will increase in intensity as the prospect of a perpetual burden of crushing taxation grows darker. But it is a fantastic view that the nation which has sacrificed its lives so lavishly to what it conceives to be the cause of national honor and vital interests will accept a humiliating peace short of actual exhaustion of men or financial resources. In so far as the latter element is concerned, complete exhaustion can hardly supervene before 1919 or 1920, at the earliest. And we cannot confidently predict that even financial exhaustion will force the German to lay down his arms. Our own Confederacy fought best when its finances were most utterly demoralized.

Hiring and Firing

Certain supply of labor employed by a certain amount of capital, and receiving larger or smaller wages in proportion as the demand for labor rose or fell. Wages would tend towards a level not only in the same country but all over the world, for when wages were low in one place and high in another, the laborer would take up his belongings and migrate. Labor was considered to be mobile, and it was assumed that the wage-earner could easily change not only his city or country but his occupation. This mobility and elasticity of labor was considered the greatest possible social asset, since it permitted competition to work itself out beneficently.

We have long since learned that labor has neither the elasticity nor the mobility ascribed to it. A wage-earner is a bundle of faiths, habits, predilections and passions as well as a vehicle of labor power, and he will not always change his country for an extra dollar in the week. Nor can he easily change his occupation. He cannot, if he is a carpenter, suddenly become a locomotive engineer or blacksmith. Stability, continuity and team-work are becoming increasingly necessary in our industrial life, and all these make the wage-earner less replaceable than before. There are initial costs in breaking in new men. It no longer pays even from the point of view of the employers' profits alone, to hire men and discharge men at random, as has been the general custom.

This point is well illustrated in an address recently delivered by Mr. M. W. Alexander before the National Association of Manufacturers and reproduced in *American Industries*. Mr. Alexander starts from the premise that every unnecessary dismissal of an employee is a loss to the employer, to the employee himself and to society, and he seeks to estimate this loss by an analysis of employment statistics for twelve large, medium-sized and small metal manufacturing concerns in the United States. The largest of these concerns carried on its payroll ten thousand, the smallest less than three hundred employees.

The amount of apparently needless "hiring and firing" which Mr. Alexander found in these factories was large. At the beginning of the year 1912, which was chosen because it was considered typical, there were 37,274 employees in the twelve establishments; at the end there were 43,971 employees, indicating a net increase in the working force during these twelve months of 6,697 employees. But during these twelve months no fewer than 42,571 people had been hired, while 35,874 had been discharged. In other words, to increase the permanent force by 6,697 employees, 42,571, or six and one-third times as many, had been engaged.