REDUCING THE COSTOFLINING

SCOTT NEARING





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Reducing the Cost of Living

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- " WAGES IN THE UNITED STATES."
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- "THE SOLUTION OF THE CHILD LABOR PROBLEM,"
- "THE SUPER RACE."
- "SOCIAL SANITY."
- "Woman and Social Progress."
 (In collaboration with Nellie M. S. Nearing)

Reducing the Cost of Living

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A MESSAGE

To the multitude of those who are grappling for existence;

To the well-to-do, struggling for supremacy;

To the scattering spectators who surround the economic arena;

and

To posterity which waits expectant on the outcome of the conflict



Preface

WITH impertinent regularity, economic and social questions present themselves for solution. At one time the central figure in the tangled mass of issues that loom before society is slavery; at another time it is universal education. Each issue, as it appears across the path of progress, must be met and mastered before civilization can resume its course.

When the twentieth century dawned the Western World was confronted with two portentous problems. One of these problems involves the relation between private and social property; the other involves the cost of living.

The cost of living issue is intimately related to the controversy over the rights of private and social property. The two problems are not inseparable, however. Indeed, in many of the phases they are sharply distinguished. Neither question can be ignored. America is a land of justice; yet blatant wrongs challenge the attention of the most superficial observer. America is a land of equality; yet the present generation enters upon a life arena of inequalities such as the world has seldom seen. America is a land of plenty, but rising prices spread hardship and misery.

The questions involved in the high cost of living are menacing in some of their aspects. The obstacles

which they present are not insuperable, however. The outlook is hopeful; there is ample room for optimism; yet the time has come when both hope and optimism must culminate in decisive action.

Contents

	Introduction	13
	PART I	
	A STATEMENT OF THE ISSUE	
I.	THE COST OF LIVING AS A POLITICAL ISSUE .	23
II.	THE COST OF LIVING AS A SOCIAL PROBLEM .	31
	PART II	
T	HE CHANGING FORM OF "LIVING"	
III.	THE CHANGING FORM OF AMERICAN LIFE .	41
IV.	THE INCREASING DEMAND FOR SERVICES	52
V.	THE INCREASING USE OF COMFORTS AND LUXURIES	67
VI.	THE ASCENDING SCALE OF NECESSARIES OF LIFE	79
	GETTING AHEAD	92
	PART III	
THI	E CHANGING PRICES OF COMMODITIE	S
/III.	PRICE CHANGES IN THE NECESSARIES OF LIFE .	103
IX.	THE CAUSES OF ADVANCING PRICES	116
X.	THE FOOD SUPPLY AND THE INCREASING POPU-	
	LATION	124
	THE INCREASING GOLD SUPPLY	136
XII.	INDUSTRIAL COMBINATION AND MONOPOLY AND THE COST OF LIVING	1.00
7111		155
Z111.	THE INCREASE IN THE COST OF RAW MATERIALS	105

*****	- · · · · · · · · · · · · · · · · · · ·	
XIV.	THE INCREASE IN LAND VALUES	176
XV.	The Increase in Labor Costs	193
	PART IV	
R	REMEDIAL MEASURES—A PROGRAM	
XVI.	FACING THE ISSUE	201
XVII.	THE SIMPLE LIFE	209
XVIII.	BACK TO THE LAND	217
XIX.	SOCIAL EDUCATION	228
XX.	INCREASING THE EFFICIENCY OF FOOD DIS-	
	TRIBUTION	240
XXI.	Conservation as a Means of Reducing the	
	Cost of Living	248
XXII.	INCREASING THE EFFICIENCY OF LABOR	259
XXIII.	INCREASING THE EFFICIENCY OF EXCHANGE .	267
XXIV.	THE REDUCTION AND ELIMINATION OF MON-	
	OPOLY PROFITS	277
XXV.	READJUSTED TAXATION	289
XXVI	THE OUTLOOK	205

Appendices

AFFENDIX A. CIAILITICS OF THE TRODUCTION OF TRECES-	
saries and Luxuries	305
(a) Statistics of Certain Industries which Produce Goods Ordinarily Classed as Comforts and Luxuries, 1909.	
(b) Statistics of Certain Industries which Produce Goods Ordinarily Classed as Necessaries, 1909.	
APPENDIX B. CHANGES IN FOOD PRICES	308
(a) Relative Retail Prices of Food, 1890-1913, as Reported by the United States Bureau of Labor.	
(b) Cost of Living in New Jersey,—Comparison of Average Retail Prices, 1898–1913.	
APPENDIX C. MOVEMENT OF FOOD PRICES AND OF EARN-	
ings in New Jersey, 1898–1912	313
APPENDIX D. VARIATION IN THE COST OF LIVING FOR SIXTY-SIX NEW JERSEY TOWNS, 1912	316
APPENDIX E. PER CENT OF TOTAL FOOD EXPENDITURES	
FOR VARIOUS KINDS OF FOOD, BY INCOME	319
APPENDIX F. ITEMIZED COST OF PRODUCTION FOR PAPER	
Pulp and News-print Paper	320
(a) Itemized Cost of Production per Ton of Sulphite Pulp, by Years, 1901–1909.	
(b) Itemized Cost of Production per Ton of News-	
print Paper, by Years, 1900–1909. (c) Itemized Cost of Production of Ground Wood Pulp, by Years, 1900–1909.	
ruip, by rears, 1900-1909.	

Appendix G. Increase in the Total Population of the United States by Decades, 1790-1910.	326
Appendix H. Comparison Between the Stock of Gold; the Notes in Circulation, and Loans	
(a) Gold Stock. (b) Notes in Circulation. (c) Loans and Discounts.	327
Appendix I. Annual Output of Gold and the Price Index Number, 1850-1912	328
APPENDIX J. FARM VALUES, 1900 TO 1910 (a) Total Farm Values, 1900-1910. (b) Increase in Land Values, 1900-1910.	330
APPENDIX K. INCREASE IN THE LAND VALUE (ASSESSED SEPARATELY FROM IMPROVEMENTS) IN CERTAIN CITIES	332
 (a) New York. (b) Three Eastern Cities. (c) Three Western Cities. 	
APPENDIX L. AVERAGE WAGE RATES PER MONTH FOR OUTDOOR FARM LABOR, HIRED BY THE YEAR, WITHOUT BOARD, 1866 TO 1909	224
Index	

Introduction

THE cost of living has been discussed in such a multitude of forms that any addition to the literature would be superfluous, were it not for the fact that few attempts have been made to treat the subject generally. Specific instances of increasing living costs, and abstract theories of causes have appeared in abundance, together with many suggestions for remedies. There seems to be lacking any unified statement covering these various fields.

The question is not without importance, however. Indeed, there is no economic topic which, at the present moment, is absorbing a larger share of public attention. Prices have been rising almost steadily for eighteen years. On every hand there are indications that the rise will continue for an indeterminate length of time. Since the bulk of wages shows no such alacrity, vast numbers of wage-earners are menaced by a dwindling subsistence.

Action without thought is as bootless as thought without action. In some cases it may be even more disastrous. If the problem of the increasing cost of living is to be dealt with intelligently, it must first yield itself to a careful examination. The facts in the case must be analyzed and stated. Only after the matter has been looked at from all possible angles, should a course of action be decided upon.

Additional weight is lent to the cost of living prob-

lem by the prominence which it has attained in recent political discussions. Peculiarly aggravating in character, and intricate to the last degree, the topic has not been made a political issue by the free choice of political leaders. Instead, it has forced itself into political prominence by its sheer bulk and momentum.

Thus far party declaration and attempted fulfilment have alike proved futile. The cost of living continues to rise. Before further regulative attempts are made and further blunders perpetrated, it seems wise to seek out the line along which a sane solution lies. What are the facts? What is their import? Should this book proceed but a little way toward the answer to some of the vexing questions involved in the cost of living discussions, it will have fulfilled its purpose. In the final analysis, no solution will be efficacious that does not carry with it the reasoning approval of the thoughtful men and women of the community.

The investigation which formed the basis for this book was intended as a scientific study of one of the imperative economic questions of the day. There is in the work no attempt to substantiate preconceived theories or to uphold catch words of reform. The conclusions reached bear no stamp of finality. Neither the first word nor the last word on the subject is here set down. Rather the book contains, first of all, a summary of the important facts bearing on the cost of living; second, an interrelation of these facts; and third, a series of suggestions regarding the lines along which any sane solution of the issues at stake must proceed.

For the convenience of those readers who wish to

get the general line of thought underlying the book before beginning their reading of it, the following brief summary is presented:

A SUMMARY OF THE ARGUMENT

At the last national election the increasing cost of living was a leading issue in each of the major party platforms. The Democratic platform was PART I particularly insistent upon the ability of Chapter 1 the Democratic party to reduce living costs by lowering the tariff and curbing the trusts. As individual issues are sifted, it becomes more evident that the public estimate of Democratic achievement must depend upon the results of Democratic handling of this particular issue. Higher living costs will prove an almost insurmountable barrier to Democratic success in 1916. Lower living costs, on the other hand, will go far toward another Democratic victory. The issue is now before the country, -an issue of immense significance,—"Have the Democrats sensed accurately and gauged wisely the forces which are responsible for the high cost of living?"

"Living" is a term that conveys different ideas to different people, because each group of people has its own standard of living. When the standard has once been set, the people living in the group must keep to it or be unhappy. The standard may begin with corn-pone or a babygrand piano; in any case it must be maintained.

The cost of living problem really involves two distinct issues. One is the issue that confronts the well-to-do; the other the issue that confronts the family of

low income. The well-to-do family asks anxiously whether it can afford this comfort or that one, always taking for granted that the bare necessaries of life will be forthcoming. The family under a thousand dollars a year is dealing with the necessaries of life. Such families have comforts, to be sure; but their primary interest is in the necessaries.

Families with large, and families with small incomes are alike affected by the change in the ways of living. The inventions and discoveries which led to the use of the steam engine, the power-driven machine, and the factory, took people from home industry to factory industry, from simple village life to the complex city life.

The growth of town and city life led to an increased dependence upon services. The village dweller could serve himself. The city dweller, partly from necessity, and among the well-to-do, partly from choice, turned expectantly to public and domestic servants, asking them to render assistance in making living easier.

Side by side with the increased demand for services there has gone an increase in the number and variety

Chapter V of luxuries which the middle class enjoys. Among the well-to-do, luxuries of food, of clothing, of house furnishings, of means for amusement and for pleasure abound.

No less significant is the change in the popular estimate of the things which comprise the necessaries of life. A hundred years ago the necessaries were few and simple. At the

present time they have increased in both number and variety. Each decade witnesses the addition of new classes of necessaries to the long category which civilization has already prescribed.

Although much of the well-to-do living is based on a desire for comforts and luxuries, another great segment rests upon the desire of the well-to-do to "get ahead." Pride leads men to furnish a house, to dress, to spend, and to live in a manner which is in no sense dictated by personal desire. The well-to-do see the cost of living problem as a problem of getting the largest possible number of goods and services in return for the income which they spend. The cost of living is rising for them because the demand for things, services and enjoyments is greater.

The family under a thousand dollars is interested in changing prices rather than in changing standards of life. For such a family the pressing question is one of securing an amount of income sufficient to buy the things which the family needs for the maintenance of physical efficiency. When prices rise the low-income family may be forced to deprive itself of some essential item in the family budget.

There is a wide-spread tendency to lay the burden for price increases upon some individual, or group of individuals. The proceeding is essentially unfair. There may be cases where an individual has been responsible for increasing prices. Such instances are, however, the exception and not the rule. The rise in prices is the result, for

the most part, of large economic forces which are not amenable to individual dictation.

The most startling feature of the recent increase in the prices of food is the rising price of meat and dairy products. A study of the facts shows that the supply of meat and dairy animals is failing to keep pace with the demand.

The gold supply of the world is increasing more rapidly now than at any time since 1850. In most commercial countries gold is the commodities are measured. Gold is the financial yard-stick. Unlike the thirty-six-inch rule, the gold dollar is decreasing in length; that is, it will buy less beef or flour to-day than it would buy twenty years ago. Although it undoubtedly has some effect on prices, the total influence of the increasing gold supply has been grossly overestimated.

Next to the increasing gold supply, the trusts are more generally blamed than any other single factor for the increase in living costs. An examination of the facts shows that there has been no general increase in the prices of trust-made goods. Some of the trusts have secured huge profits, it is true, but these have been the results of improved methods of production and not of increased prices.

Producers insist that prices have advanced because of the advance in the cost of the raw materials and the chapter XIII labor which enter into manufacture. The prices of raw materials have changed unequally. Raw materials derived directly from the land have risen rapidly in price, while semi-manufactured

materials have increased less sharply or have decreased in price. Attention is called again to the increase in the cost of land-derived products. Food prices rose rapidly in the cases of meat and dairy products. The prices of those raw materials most directly secured from land likewise have risen fastest.

The facts show that during the past twenty years, the values of agricultural land, timber land, and city chapter XIV land alike reveal a marked upward tendency. The facts relating to value increases during the past two decades may be searched in vain for any parallel to the rapid increase in the values of those particularly desirable parts of the earth's surface upon which mankind is most intimately dependent for his living.

The meager figures relative to wage changes indicate that there has been a general tendency to increase Chapter XV wages. Whether this increase has been offset by a corresponding increase in efficiency, the facts at hand do not show. On the face of the returns, labor engaged in agriculture, in transportation, in construction work, in mining and in manufacturing, is paid at a higher rate in 1914 than it was in 1890.

The high cost of living appears as an issue of immense proportions. Its phases are various; its causes manifold. No one can put his finger on any one cause and say,—"Lo here!" or "Lo there, is the cause of the increasing cost of living." Nevertheless, the question must be solved; otherwise Western civilization is a self-confessed failure. The remedy before the well-to-do is an individualistic one. Each man is his own want ad-

juster. The remedy open to the worker is a social one. He can secure more returns for his labor by buying at lower prices, or by getting more service for his expenditure.

While men cannot follow Rousseau's behest and get back to nature, they can simplify their wants, bring them within the reach of their incomes, and look for satisfaction in other ways than through the possession of things. The hope for the well-to-do lies in a new vision of life. The ideal of possession must give place to that of service.

Society must get back to the land. The cost of living of the well-to-do can be effectively reduced by dechapter XVIII creasing the number of services upon which they depend, and by bringing them into direct contact with the work of producing as many as possible of the things which they use.

Education can play a large, though indirect, part in reducing living costs. People may be taught to buy chapter XIX intelligently, and to use to the best advantage the things which they purchase. Then, too, producers and consumers may be educated to coöperate, and thus to reduce the costs of production and of marketing. Education will raise the standard of public intelligence, and strengthen the sinews of public demand.

Another ready means of price reduction lies in greater efficiency of food distribution. Man has been separated from his pigs, chickens and kitchen garden. As a villager, he supplied many of his own wants. As a city dweller, he buys the food which he needs. That the food may

reach the consumer at the lowest possible figure, it is necessary that the steps from producer to consumer be reduced to a minimum and simplified to the utmost.

Speedy increase of land values makes clear the importance of conservation as a means of regulating living costs. No more significant duty rests upon society than the conservation of its soil fertility, its timber and mineral resources, and its water rights. Such a policy is a long-term policy. No one administration can inaugurate it and carry it to completion. Nevertheless, it is a social investment of the utmost value.

Most boys who go through the schools will engage in some occupation. The real question before the school chapter XXII is,—"Shall these boys go out of the schools fitted to do their work well or badly?" Vocational training is the answer. Labor efficiency may likewise be increased by improving health, lengthening life, providing incentive, and improving mechanical appliances. All such devices, by adding to the productive power of the community, tend to lower prices.

The chaotic arena of financial controversy offers rich opportunities for activities that must finally play a chapter XXIII large part in stabilizing values. The gold supply is increasing so rapidly that it is no longer a stable medium of exchange. Nothing short of an agreement between the great commercial nations to control the output of gold mines, or to use fiat money, can stabilize gold values.

Monopoly means a control over a commodity, which is sufficient to raise or to maintain its price above the price level of free competition. The sources of monopoly power in the United States are land ownership,

Chapter XXIV franchises and similar public grants, patents, credit monopoly, and industrial monopoly. All forms of monopoly power must be taken from the hands of individuals, and lodged in society. Through this means drastic modifications undoubtedly can be made in the cost of living.

Perhaps the most practical step toward the reduction of monopoly power is the readjustment of taxation on this basis assumption,—"Each man has a right to all that he earns, and to nothing more." Taxation is the legitimate means by which the people can take over all values belonging to society. The national administration faces a grave responsi-

bility. To its care has been committed the task of reducing the cost of living. No more in-Chapter XXVI sistent issue presses for solution. A successful program for reform must include increased efficiency, conservation, and monetary reorganization. besides the elimination of monopoly profits, through a The well-to-do can settle readjustment of taxation. the matter by simpler living; but the lower-income families, which comprise the great mass of the population, are dependent for relief on a policy which will give to each man what he earns and no more, which will take for social uses the values created by society, and which will regard the state as an organization of citizens effected and maintained to minister to their needs and to the needs of their descendants.

Reducing the Cost of Living

I

THE COST OF LIVING AS A POLITICAL ISSUE

1. PLATFORM PLANKS ON THE HIGH COST OF LIVING

SINCE 1895, there has been an almost uninterrupted rise in the prices of foods and of other important com-The Republican party a decade ago talked about the full dinner pail, yet the years of Republican administration passed without any successful adjustment of the wage scale to rising prices. The subject was discussed around breakfast tables, bridge tables, and café It was an issue which occupied a promtables, alike. inent place in the thinking of every one who was buying things. Women knew more about it than men, because they do most of the spending in the ordinary Men had learned of it, however, since they supply most of the money which is spent. By 1911, the increasing cost of living was so manifest an issue that no party could afford to ignore it.

Although the parties differ in their analysis of the cost of living problem, they agree in their recognition of its imperative demand for solution. "The high cost of living is a serious problem in every American

home," declares the Democratic party. The Republican party states that,—"The steadily increasing cost of living has become a matter not only of national, but of world-wide concern. . . . When the exact facts are known, we will take the necessary steps to remove any abuses that may be found to exist, in order that the cost of food, clothing, and shelter of the people may be in no way unduly or artificially increased." The Progressive party platform holds that "the high cost of living is due partly to world-wide, and partly to local, causes; partly to natural, and partly to artificial causes." In each case, the issue is analyzed at some length.

The matter of solution is variously handled in the three platforms. The Democratic platform ascribes the high cost of living to the high tariff and the existence of trusts. The Republican platform specifically "The fact that it is not due to the prodenies this. tective tariff system is evidenced by the existence of similar conditions in countries which have a tariff policy different from our own, as well as by the fact that the cost of living has increased, while rates of duty have remained stationary or have been reduced." The Progressive party initiates a more specific solution. "The measures proposed in this platform on various subjects, such as the tariff, the trusts, and conservation will of themselves remove the artificial causes. There will remain other elements, such as the tendency to leave the country for the city, waste, extravagance, bad systems of taxation, poor methods of raising crops and bad business methods of marketing crops. remedy these conditions requires the fullest information, and based on this information the effective government supervision and control to remove all the artificial causes." Specific remedial measures are not abundant in any of the platforms. The Democrats propose to reduce the tariff and break up criminal conspiracies. The Republican party commits itself to "support and promote scientific inquiry into the causes which are operative, both in the United States and elsewhere, in increasing the cost of living." The Progressive party pledges itself to "such full and immediate inquiry and to immediate action to deal with every need such inquiry disclosed." Among the three parties, there is unusual agreement as to the statement of the problem, and no inconsiderable uniformity in the vagueness and unsatisfactory indefiniteness of the remedies which they propose.

2. THE STAND OF THE DEMOCRATIC PARTY

The Democratic party did not declare itself in favor of any unusual policies with regard to the cost of living, but it went into office with the best wishes of a large section of the American people, who believed that through its activities the cost of living might be reduced. The rapid price increases of the years immediately preceding the election of 1912 had brought the cost of living issue to a very acute stage. Whatever its causes, the Republican party had "stood pat," making no active effort to remedy them. The Democrats, alleging this inaction as a cause of increasing prices, declared that they could bring about material price reductions.

"The Republican party," declares the Democratic

platform, "attempts to escape from responsibility for present conditions by denying that they are due to a protective tariff. We take issue with them on this subject, and charge that excessive prices result in a large measure from the high tariff laws enacted and maintained by the Republican party, and from trusts and commercial conspiracies fostered and encouraged by such laws, and we assert that no substantial relief can be secured for the people until import duties on the necessaries of life are materially reduced and these criminal conspiracies broken up." The increase of living costs under successive Republican administrations, and the failure of the Republican party to take any drastic steps to reduce the tariff or break up the trusts, lent additional color to these declarations of the Democratic platform. The country, impatient under the goad of rising prices, saw in the Democratic program a possible loophole of escape from the high cost of living.

No one can fairly maintain that the present Democratic administration will stand or fall as it solves or fails to solve the high cost of living problem, yet it may be asserted with much show of reason that the popular judgment of the success or failure of the present administration will rest in large measure on that issue. The President may be never so able as an administrator; his diplomatic adventures may be never so successful; he may direct his party with unfailing energy and courage; he may carry out the party platform to the letter; nevertheless, if at the end of his administration prices are as high, or higher than they were when he took office, the country will react vigorously against the Democratic party.

Should the Democrats fail to reduce the high prices, they will throw themselves open to the charge of failure in a matter which comes directly to the attention of almost every voter. Most issues of political importance are far removed from the housewife and from the man of the street. The tariff, diplomacy, trust regulation, and national conservation are splendid in the abstract, but they have no concrete meaning in the High prices are known and underordinary home. stood wherever income is received and commodities are purchased. The Democratic party may feel, and justly so, that it will achieve successes in fields other than those involving the high cost of living. For the great majority of mankind, however, the price of commodities in 1915 and 1916 will serve as the most concrete measure of the success or failure of Wilsonian democracy. A considerable reduction in prices during those years will send the Democratic party back into power on the high tide of popular favor. An increase in prices will fasten upon the country at large a belief that the Democrats have failed in their main purpose.

3. WILL THE DEMOCRATS REDUCE THE COST OF LIVING?

Pursuant to the policy stated in its platform, the Democratic party, immediately after taking office, undertook three lines of activity, all of them aimed more or less directly at the high cost of living. In the first place, a special session of Congress passed a tariff bill that materially reduced import duties. The business world stood appalled at the revolution which the tariff was to effect in its status. Industry,

particularly the textile industry, was foredoomed to annihilation according to many forecasts. The time has not yet come for scientific analysis, but the official enactment of the tariff bill prescribing a level of duties considerably below that of any recent Republican tariff, has resulted, apparently, in no business failure or calamity. What ultimate effect the passing of the tariff bill may have on prices remains to be seen. For the present, prices show no material change that may be ascribed to tariff reductions.

The second important measure which the Democratic party passed through Congress was the currency law, reorganizing the banking system. For a long time charges had been made respecting the existence of a Wall Street money trust. Interlocking directorates, chains of banks and trust companies, and the concentration of great masses of capital in a few hands resulted in the virtual control of the nation's credit by a small group of men. The dangers of such control were manifest; its effect upon competition was apparent. Some form of decentralized banking was therefore necessary, and the Democratic scheme for regional banks replaced the banking system which had grown up since the Civil War.

The effects of the financial reorganization brought about by the currency law remain to be seen. That the change has materially modified external conditions in the banking world is obvious. That it has seriously impaired the concentrated power of certain financial interests is not so certain. What its effect on prices may finally be, the future alone can disclose.

The third proposition advocated by the Democrats

was concerned with the regulation of industrial combinations. Blame for most of the ills incident to modern life had been for a decade heaped on the trusts. The Republican party had made attempts, more or less successful, to regulate trusts. The Democratic party placed its trust program before the country in the form of a number of significant, regulative measures. All of these measures were based on the general economic theory that competition must be restored, and that any attempt at an ultimate solution of economic problems must be based upon this restoration of competition. Again, the future must be relied upon for an answer as to the efficacy of the Democratic trust program.

4. THE ISSUE BEFORE THE CITIZEN

The thoughtful citizen who has watched the rapid climb of prices during the past two decades, and who has an interest in the outcome of the present political movements, naturally asks himself the question,—"Will these three star plays of the Democratic administration lead to the desired reductions in the cost of living, without which the Democratic party can scarcely hope to win another national election?" Nearly every voter is looking anxiously for an answer to that question.

The popular judgment of the success or failure of the Democratic administration in the success or failure of its efforts to control the high cost of living will be passed wholly irrespective of the merits of the case. Popular opinion is hazy on the whole cost of living question. Much expert opinion is no less nebulous. The atmosphere of confidence, which has thus far surrounded the administration at Washington, arises out of the belief that considerable reductions in the cost of living will follow the passage of the measures which the President has so ably fathered. Whether they will have the desired effect depends upon neither public opinion nor Democratic pronouncements, but rather upon the underlying causes which are operating to raise living costs.

THE COST OF LIVING AS A SOCIAL PROBLEM

1. A SOCIAL ISSUE BECOME POLITICAL

THE cost of living problem has forced its way into politics. It is too full of unexplored recesses, and fraught with too many unmeasured possibilities to make a welcome political issue. Many political issues are woven from the fertile imaginations of astute votegetters. No such jingo practices were necessary to bring the cost of living into the foreground. The people knew that the increasing cost of living was a problem before the politician awoke to its existence.

Popular knowledge led quickly to popular demand. By the time the matter had reached the cartoonists it had assumed real significance. Then politics acted.

The cost of living issue is typical of those issues which are injected into politics. At least one party has been persistently telling the voters that their dinnerpails were habitually full. The advocates of this party platform even went so far as to describe party allegiance as an automatic dinner-pail filler. Prosperity was assured, this party maintained, so long as it remained in power. In opposition to these assertions, the phantom of advancing prices stalked through women's minds, into the columns of daily news, and into the funny sheet. "Cost of Necessaries Jumps

Again," the head-liner announced, and the cartoonist built a table with extension legs, and loaded it down with a tempting dinner, which the legs waved far above the reach of the hungry family seated about. The issue was made on the bread and butter appeal.

The increasing cost of living has been converted into a live issue, not because political economists and politicians know anything about it. Indeed, there are few problems on which their knowledge is less accurate. The issue has arisen because the women and men of the country, who pay the grocer and the dry-goods merchant, have found it increasingly difficult to make ends meet.

2. The Challenge of the Home

The cost of living problem is a problem which confronts those who spend income; therefore it arises in the home. The home made its appeal to the powers that dominate politics, asking,—"How shall we buy the necessaries of life?"

The politicians might, under certain circumstances, answer the question by insisting that with the rise in prices there has gone a corresponding increase in income. The peculiar circumstances which would justify such a statement are frequently not present, however; hence the statement cannot be made. The challenge of the home remains unshaken, and becomes automatically an ugly, dangerous issue in the field of politics.

The man who raises the issue must be bold as well as learned. The homes hang upon his word. If he says,—"Let me take this issue with me into the White

House, and I will solve it for you," the homes, if they trust him, are prone to accept his proposition. to him if he fails, however! The homekeepers have their eyes fixed intently upon him. By this one question he will be justified or condemned.

The cost of living is a peculiarly dangerous issue to handle, because the homekeepers cannot be fooled in regard to it. It is possible to assure an ordinary citizen that the money-trust, or some other trust, is dissolved; that the natural resources of the nation are being conserved; that the foreign policy is sound. The man on the street must accept the word of some one on such matters, because he has no means of directly confirming his own judgment. The produce market and the grocer's store offer a daily opportunity for the homekeeper to confirm her judgments regarding the cost of living.

The problem of the increasing cost of living originates in the home. There it has its most obvious effects,-in the relation between income and expenditure. From the home it has been forced out into politics. At bottom, however, it is a social problem.

3. WHAT IS LIVING?

What does living mean? A part of the answer is contained in the phrase, -" The American standard of living," as contrasted with that of some other locality -China or Hindustan, for example.

A little reflection will reveal the immense range of meanings which may be attached to "living." Each town or city, and each social group within a town or city, has its own ideas on the subject. Living standards also vary from one part of the world to another. Unless living be taken to mean "the state of being alive," as contrasted with death, there can be no definite meaning attached to the word. A social group at a given time has its own definition of living. For the savage living means an opportunity to get food, to escape from enemies, to protect himself against the inclement weather. The typical American, unused to such living, would describe it as unendurable hard-The American Indian with a well-organized system of government and a written language, a knowledge of agriculture and of many of the simpler arts, lived crudely in comparison with American present-day standards. The Jew in the ghettos of Russia lives under conditions of congestion and insanitation which seem unendurable when contrasted with American standards. When the Jew or the Sicilian settles in the ghettos of New York, and for the first time in his life enjoys the privilege of glass windows and wooden floors, he feels that he has taken a long step toward the joys of paradise. Illustration might be multiplied of variations in living standards: suffice it to say that the members of each group are expected to conform. When men speak of the cost of living they therefore mean the cost of that kind of living which has the sanction of the community. Such an estimate is relative, not absolute. The American workingman could live on black bread, rice, and soup. He could herd his family in a single room; he could buy one good suit every ten years; he could suffer from typhoid and smallpox; he could be subject to all of the maladjustments which afflict men in more primitive com-

The American workingman could suffer munities. these things and still live, yet from the American view-point he would enjoy, not a living, but a bare existence.

The native American has accustomed himself to a certain standard of living. The Jew or the Sicilian, settling in the ghetto of New York, soon discovers this. If he fails to make the discovery, his children make it for him, and they insist on adopting the more elaborate American standard.

There are a number of things which the ordinary American man or woman has which may be unnecessary in the strictest sense of the word. Ribbons, finely finished shoes, well-cut clothes, sanitary conveniences, newspapers and street lights are comparatively modern products. Ages of men lived without them. Yet when the bathtub and the tooth-brush have once been introduced into society, on what grounds can they legitimately be excluded? The standard of living is fixed by the advancement of civilization. "The cost of living" is the cost of that standard.

THE INCREASED COST OF KEEPING THE PACE

American life involves a universal competition for equality or for excellence. From the lowest to the highest income rank men and women strive to excel in the number or splendor of things that they have. However desirable or undesirable this competitive régime, it exists none the less surely. Therefore in the discussion of the cost of living it must be reckoned with.

The active competition for excellence, coupled with

the advance of science, has resulted in a startlingly rapid increase in wants. Who wanted a bathtub fifty years ago? How many men wanted an automobile in 1890? Who wanted prepared breakfast foods in the last generation? Who wanted telephones, phonographs, or moving picture shows when our fathers were young? All of these things are new, and the want for them could not arise before people knew that such things existed. Furthermore, these are only a few illustrations from among the countless numbers of new things which pack the counters of department stores and fill the catalogues of mail-order houses. Education, advertising, freedom to pass from one social group to another, the general feeling of equality in a democratic society, and the desire to have as many things as your neighbor, all tend to push up the standards of every group in the population.

The increase of wants and the development of civilization go hand in hand. Unless they are accompanied by increasing income, an increase of wants leads away from happiness toward dissatisfaction. It is useless to want a grand piano on ten dollars a week. Such an increase in wants is, however, a spur to ambition, and consequently an effective means of encouraging activity. Most men will not expend energy until they are stimulated by wants which press for satisfaction. Human wants are the driving forces behind civilization.

5. "LIVING" MEANS MORE THAN "PRICES"

A little thought will convince any one that the term "increasing cost of living" really means more than an increase in prices. In fact, for a certain group of the

population, the chief element in the increasing cost of living is the increase in the number of things that a man must have in order to "live." To be sure, the increase in prices plays a part. For the family living on \$600 a year it plays a very material part. For families having more than \$3,000 the increase in prices is immaterial. The real stumbling-block to their happiness is an increase in the number of things that people must have in order to "belong."

All living has a definite purpose,—the obtaining of a certain amount of things. The things included in a living are those which satisfy human wants, such, for example, as the wants for shelter and clothing, the wants for food, amusement, and the like. The wants of different people vary. The wants of one section of the country are not the same as the wants of another section. Generally speaking, however, there are certain things, like clothing, simple foods, shoes, hats, and houses, which all people want and use. The total cost of living for any family or any individual varies with the standard which that family or individual must maintain.

The increase in the number of things which men include in their ideal of living and the increase in the price of these things, are knotted together into a cost of living problem. Generations of strenuous life and of avid social competition have tied these knots securely, until a time has been reached when it is an extremely difficult matter to undo them. It is, of course, possible to follow Alexander's example and untie the knot by cutting it. For the man who wishes to live in American twentieth century society, however, some

other solution must be discovered. The well-to-do people in any American community are interested for the most part in a determination of the amount of things which they shall buy; they never want for the necessaries of life. There is no time in the well-to-do household when the possibility of missing a breakfast will be considered. Breakfast will be served, of course, as will lunch and dinner. The question as to what will constitute breakfast, lunch, and dinner is, however, a very real one. The question, too, as to where and how the family shall spend its vacations, what form its recreation shall take, and to what extent it is justified in spending income for luxuries, occupies an important place in all discussions. families accept the necessaries-food, clothing, and shelter—as a matter of course. They are at odds over luxuries. Since they cannot have all that they want, they must take this thing or that. The family may have an automobile or a new house; it cannot have Out of this necessity for choice arises much middle-class misery.

Those people in the community who are not well-todo (in America this group probably constitutes at least four-fifths of the industrial population) are concerned chiefly with the question, "Can we afford to buy the necessaries of life? Can we have a sanitary house; can we have nourishing food; can we have clothing which carries with it the ear-mark of respectability?" For such families, the issues involved in the increase of the cost of living bear mainly on family necessities.

Some idea of the situation may be gained from the fact that the ordinary workingman's family of five

spends two-fifths of its income for food, one-fifth for rent, and one-sixth for clothing. This expenditure leaves a little more than one-fifth of the income to cover fuel and light, health, insurance, recreation, savings, and all of the other miscellaneous items of expenditure. For a family living on \$750, the amount available for all of these purposes would rarely exceed \$160 or \$175 a year.

The family with more than \$1,200 a year is not deprived of the necessaries of living when prices in-A man with less than \$1,200 may be. families are engaged in an attempt to increase the number of things which they may have and the number of enjoyments that they may secure. For both, therefore, the increasing cost of living is a significant prob-For the man under \$1,200 it is deeply signif-If he receives less than \$750 it is sinister.

Whether the increasing cost of living is looked upon as an issue confronting the well-to-do, or as an issue confronting families with small incomes, it is an intense and vital one. Its presence in a community is the result not of individual caprice, or of individual decision. Rather it is the product of social forces which have been operating unnoticed for generations.

6. SOCIAL REORGANIZATION HAS FORCED THE Testie

The cost of living problem has become a problem in the process of a social reorganization which the eighteenth century began, and which the nineteenth century carried far toward its logical conclusion. No individual, or number of individuals, could have made an issue of such stupendous proportions. It required the readjustment of family life; the reorganization of the city; the movement from the village to the large center of population; the growth of specialized industry, and the increasing dependence of the population on factory products, to throw the cost of living issue so prominently into the foreground.

Families in every walk of life have passed from independence to dependence. Men earn what they can, and spend what they must, meanwhile striving to make both ends meet and to live according to the standard set by their friends and neighbors. The self-sufficient Kentucky mountaineer is independent of prices and living costs. The dweller in a great city is tied hand and foot to the cost of living.

The evidences from every side indicate that the social problems arising out of the change from village life to city life are pressing for solution. Advancing standards on the one hand and advancing prices on the other harass the man whose welfare depends upon the amount of "living" that his income will purchase. Working class and well-to-do families alike are learning to understand the effect of rising standards and of rising prices upon their welfare.

THE CHANGING FORM OF AMERICAN LIFE

1. THE COST OF HIGH LIVING MAKES THE COST OF LIVING HIGH

THE first element in the high cost of living is the high standards which the American people have set for themselves. Not content with the simple definition of living laid down by their Puritan ancestors, they have felt called upon to readjust their standards with the enlarging boundaries of civilization.

The constant redefinition of "living" in terms of higher and higher standards places before society a constantly advancing ideal of life. While the goal of living is a will-o'-the-wisp, no one can be expected to find any great satisfaction in a past, or even in a present, standard of living upon which the community has agreed. The end to be attained beckons from over yonder, and thither we make haste to go with all of the speed that desire and ambition can muster.

That will-o'-the-wisp, the cost of high living, has an excellent reason for existence in spite of the numerous anathema that are directed against him. He was engendered in the spirit of social progress, and his early surroundings were those of a rapidly changing social order. Hence, when he seems over-insistent upon change, men should never forget that he is, by hereditary right, the child of change.

2. NEW WAYS OF GETTING A LIVING

It is a part of man's nature, as it is of his training, to seek out new methods of achieving results. Not the least among the changes which his indomitable inquisitiveness has wrought are the changes in the way of making a living. The hand rake and shovel give place to power machinery. Every device which will add to the good things of life is eagerly seized upon.

Mankind wishes to live well. Having learned that a long life and a comfortable one may be assured through the adoption of this device or of that one, some exponent of progress comes forward, advocating, insisting, until the change is wrought. A new way of getting a living proves attractive to humanity, particularly when that new way is an improved way. savage who first used fire to cook his food was unquestionably ridiculed, threatened, censured and perhaps even executed. His neighbors, tasting of the mess which he had made, soon adopted his scheme, however, because cooked food was much more palatable than food that was uncooked. The same thing is true of the use of the oven. Men, accustomed to the products of the open fires, laughed until they ate. The savor of the oven-cooked food reassured them, and made amends for many a hoary tradition now reduced to the rank of a "barbarism descended from the past."

3. THE INDUSTRIAL REVOLUTION AND AFTER

The latest, and one of the most complete changes ever made in the method of getting a living, is that involved in the substitution of machine labor for the labor of the hand.

Until about 1750 men made things with their hands. The tools which they used were simple hand tools. One individual took a piece of leather and turned it out of his shop a finished shoe; or he converted cloth into a suit. This hand-craft system of industry required the outlay of a great deal of human energy. If there was lugging and carrying, some man did the work. If the shuttle was to be thrown, a human hand threw it. Industrial power was human power, the power of the arms, legs, and backs of men.

The industrial revolution involved an overthrow of the hand-craft industries. A number of inventions coming within a period of fifty years resulted in the perfection of the steam engine, of the manufacture of iron and steel, and of textile machinery. These inventions were the backbone of the factory system of production.

Under the impetus which the factory system gave to civilization, men left their village homes and moved into great city hives of industry. In England large groups of the population abandoned agricultural towns in the Southeast, and moved into the Northwest, where coal and iron lay side by side awaiting the touch of human genius to convert them into implements, by means of which the work of the world could be facilitated. These newly discovered sources of mechanical energy greatly augmented man's power to produce wealth. Where the human hand could make one nail. the machine could make a hundred. Where the human back could lift a bushel of corn, the machine lifted a thousand. In every direction man's authority over the forces of nature was increased and multiplied.

There is this difference between the tool and the machine. The tool is simple, easily manufactured, readily manipulated, and so cheap as to be owned by those who use it. The machine is complex, intricate, bulky and costly. It cannot be operated or owned by any individual. The replacement of the tool by the machine transformed the tool-using, skilled mechanic into a semi-skilled machine tender, whose duty consists in seeing that the machine, which his employer owns, does its work well. No one would for a moment suggest that individual workmanship has disappeared from industry. Neither can any one who is familiar with industrial conditions fail to realize that the large proportion of factory operatives are merely subordinates, working side by side with their pace-setting superiors,—the machines.

Hand-craft industry could be carried on by one man in his home or in his shop. Factory industry is carried on by large groups of men working together in great establishments. A great establishment is impossible without a wide market for the goods produced. Once this market is secured, however, the great establishment becomes inevitable.

4. The Concentration of People—City Life

With the exception of commercial cities, the oldtime town depended very largely for its prosperity upon the surrounding agricultural districts. Farmers raised their products, brought them to town and exchanged them for the groceries, or other store goods, that they needed. In this way the large town and the small city grew up on a basis of rural prosperity. The city life of the twentieth century is essentially industrial. It is built, not upon the prosperity of neighboring rural communities, but upon its own industrial success.

The change from dependence upon an outlying rural district to internal industrial activity has transformed the city. Twentieth century city life is centered about factory industry. As factories grow in size and number, industrial cities grow. Whatever the limit of industrial development may be, it has not yet been determined. Until it is determined, cities will continue to grow in size, with the growth of the industries upon which they depend. The concentration of city population will be constantly accelerated by the concentration of industrial enterprises.

5. THE MOVEMENT TO CITIES

Men realize with difficulty the extent to which American life has been transformed in a little more than a century. In 1790 there were in the United States six cities with over eight thousand inhabitants. In these cities lived about one hundred and thirty thousand souls, or about three per cent. of the total population. In 1910, of the 92,000,000 people in the United States, nearly one in ten lived in the three cities of New York, Chicago, and Philadelphia; one in three lived in some large urban district; and one in two (fifty-five per cent.) lived in incorporated villages, towns, and cities. The United States is becoming a country of city dwellers.

Since there is as yet no clear limit to the increase in industrial concentration, there is no apparent limit to the increase in city population. Some portion of the population must remain on the land to provide the food supply. As mechanical machinery is improved this proportion may grow constantly less, while the great stream of immigration carries men almost exclusively into the industrial city life.

The cost of living problem is in certain respects a city problem. It is because men must live in cities that they have left their kitchen gardens and their simple rural ways. It is in large measure because men live in cities that their food, for which the ordinary man spends two-fifths of his income, must be produced in rural districts, and shipped to urban centers. The life problem of the cities arises out of the fact that people are living together. The more coherent their social activity, the more satisfactory will their living be.

6. THE FAMILY AS THE SOCIAL UNIT

Family life lies at the basis of the cost of living problem, because the family is the consuming unit in modern society. Presided over by a woman who purchases the food, the family is the ultimate destination for which most consumable things are produced. There are to this general statement a number of notable exceptions. The spread of hotel life decreases the importance of the family as a consuming unit. The tendency of individuals to keep "bachelor apartments" decreases the potency of family control. All in all, however, the family is still the consuming unit in society. Of prime interest, therefore, is the question, "What type of family confronts the cost of living in the twentieth century?"

The rural life, so prevalent in the early nineteenth century, is fast disappearing in the twentieth. sufficiency and economic independence are giving way before cooperation. The twentieth century is the century of the city, of big business, of wage-earners, of machinery, of factories, and of economic interdependence.

Rural life remains, of course. There are more individuals engaged in the agricultural business than in any single form of business. Rural free deliveries, telephones, automobiles, interurban trolleys, express trains, daily, weekly and monthly papers, phonographs, and improvements in educational devices, have socialized farm life by giving it a solidarity of its own, at the same time linking it to the world. farmer as a seller and buyer is no longer dependent upon his own products for a living. He, too, is factory-fed, clothed and entertained. Thus has the factory system of production revolutionized even rural life.

The interest of the present study centers, however, primarily around the city family, because it is in the city that the new civilization will stand or fall. city family is the family of the future. It is the family which the twentieth century must unify and re-create to meet the new type of needs which the last hundred years have evolved.

The changes in family life which have been wrought during a century are revolutionary in the last degree. The characteristics of the nineteenth century family were. - economic solidarity, division of occupations, economic independence, and independence of prices.

Each one of these characteristics was an economic asset of considerable importance in freeing the family from the burdens now imposed by rising prices.

The economic solidarity of the family was based upon division of labor and resulted in economic independence. Each member of this family was necessary to the economic well-being of the family group. Hence the entire family was bound together by economic ties of the strongest character. The father had his work in connection with the shop, the farm, or the store. As manufacturer, husbandman, woodcutter, or tradesman, he had an occupation, which, while yielding him an income, permitted him at the same time to carry on his work in close connection with the family life. The mother likewise had her definite service in connection with domestic economy. She was responsible for making clothes, for cooking, preserving, washing, and caring for the house. Sometimes, in addition to these regular duties, she assisted the father by spinning or carding, tending the domestic animals, or caring for the kitchen garden. all events, she, too, had a group of occupations very different in character from those of her husband, and absolutely essential to the continuance of the home.

These home occupations were something more than occupations, however, since they gave the parents an unrivaled opportunity to educate their children by the practical doing of things. Rural life abounds in chores. There are scores of tasks every day in which boys can assist their father, and girls their mother. The division of occupations in the home thus gave an opportunity for the employment of children under

home supervision, which furnished an excellent training-ground, at the same time giving the child a definite place in the economic life of home.

This economic solidarity, based on division of labor, gave the family a most complete independence from outside sources. Making their own products and consuming the things which they made, they were able to dispense with money income, and with the necessity for purchasing commodities. Receiving and spending little money, largely independent of outside sources of supply, the prices of goods made little real difference to family welfare.

With this self-sufficient family of the early nineteenth century contrast the industrial family of the twentieth century. This family is, in the first place, dependent largely on money income for its support. Living in towns and cities,—cut off, therefore, from most sources of secondary income, -engaged in occupations outside of the home which do not yield any direct return in the form of economic goods, the twentieth century family, instead of being a producer of its own consumption goods, has become a consumer of consumption goods produced by others. The nineteenth century family was a potential seller, because it was a producer of goods which it might consume. twentieth century family, on the contrary, is a potential buyer, because it is dependent absolutely on the purchase of goods produced by some one else. change from potential seller to potential buyer means not only economic dependence, but it necessarily means high prices. The potential buyer must pay for the product which he obtains, the cost of production, plus

at least a reasonable profit, and under prevailing economic conditions, a handsome monopoly as well. Take knitting as an example. Any middle-aged person will remember distinctly the click of knittingneedles in some one's else living-room. Perhaps the mother, and certainly the grandmother, occupied her spare moments in knitting mittens, socks and caps. To-day, however, knitting-needles are almost never Neither the grammar nor the high school graduate is taught to use tools which two generations ago were considered an indispensable part of the equipment of every home. On the other hand, the hosiery and knit-goods factory industry has grown with astonishing rapidity, until in 1909, in the state of Pennsylvania alone 40,248 persons, assisted by machinery aggregating 22,000 horse-power, are engaged in the manufacture of fifty million dollars' worth of knit goods annually. Knitting, together with a hundred other eighteenth-century crafts, has become a factory industry.

This transference of occupations from the home to the factory converts the home into a buying rather than a producing unit. When grandmother knit the socks the family had them at cost. When the machine knits them, the rent, interest, wages and profits of the factory must be added to the cost of the materials before the final price is made. Grandmother knit in spare minutes, or at a time of life when she was unfitted for more strenuous labor, for her knitting was a secondary occupation or a pastime. The factory employees, old and young, knit for a living. Knitting is their trade, and they must be paid accordingly.

7. THE FAMILY AS A BUYER

This new family status,—the family as a buyer rather than as a seller,—is an inevitable accompaniment of twentieth century civilization. Society has set its stamp of approval on modern industrialism. Industrialism means life in towns and cities. The sole avenue of wholesome city life is a radical readjustment of family relations which will permit the family to occupy its new economic position to the advantage of all concerned.

The nineteenth century family was a producing, selling, largely self-sufficient family. The twentieth century family is a consuming, income-earning, buying family, dependent for its continuance upon the economic activities of hundreds of thousands of other families. Selling was incidental to the life of the nineteenth century family. Even if markets were closed tight, it could survive. The twentieth century family must always earn, because it is under the constant necessity of buying. The prime requirement for the survival of the old family was production; the prime necessity of the new one is purchasing power. To meet this new need, there must be developed a high type of city family with income sufficiently augmented to purchase the livelihood which the old family created for itself.

THE INCREASING DEMAND FOR SERVICES

1. "IF YOU WOULD HAVE A THING WELL DONE ——"

THE first issue which the student of the cost of living must face has to do with the rising standard of life that has paralleled the transformation of society from an agricultural, village life, to an industrial city life. The increasing scale of comforts and luxuries, the advancing ideas regarding the "necessaries of life," and the intense struggle to "get ahead," are all involved in the question of rising standards. "The transformation of society" is an abstract term, but its practical connotations are legion.

Among the changes which the past century has wrought, none is more poignant than the increasing demand for services. "If you would have a thing well done, do it yourself," wrote the sage. Out of the wilderness of primitive ideas and of an undeveloped civilization, he admonished mankind to insure satisfaction by relying upon personal resources.

During the years that have intervened since the sage expressed his estimate of personally wrought service, civilization has advanced by leaps and bounds. As civilizations grow up, man learns to seek for satisfaction from two objective forces,—goods and services.

In the case of both goods and services, man may rely on his own energy or he may look to others for the supply.

Civilization means an increase in the proportion of goods and services which come from other people. As society advances in its development, increasing the while in numbers, men's relations with each other become more and more complex. From this time forth and forever, men will work and live together in social Therefore they will be dependent on one another for the things which they need and for the services which they require.

There is no real sense in which a twentieth century man may serve himself. Cooperation lies at the basis of modern social life.

Coöperation-mutual service-reduces the cost of living by enabling each person to secure a more abundant return for a given outlay of energy. Each man learns his own task thoroughly. Each depends, for the things he needs, on a group of individuals, each one of whom has mastered a particular job. There is, however, a time in which a dependence on services involves an increase in the cost of living. It is for this reason that the matter is taken under consideration.

LET PETER DO IT 2.

A man may ply his trade, and by exchanging the products of his energy for the products of another, he may increase the bounds of his life enjoyments. He may, on the other hand, lay down the hire of laborers, and stand idly by while some other does the work from which he expects to reap the reward. This

matter of letting Peter do it is one great cause of the increased cost of living among the well-to-do.

First there are the things which no person can do and remain a lady or a gentleman. Among the rude settlers of America, during the eighteenth century, these things included all acts which soil the conscience or destroy the good name. In present-day well-to-do society, they include those tasks which will soil the hands or destroy the crease in one's trousers.

Many forces are at work to counteract this spirit of social snobbery. Country life, vacations, athletics and college all play their part in democratizing men and women to a point where they are willing to do anything,—at college. Nevertheless, when they get back into the straight-jacket of formal life at home, they distinguish sharply between "servant's work" and work that a lady or a gentleman can do. There is many a small town and many a fine suburb where these lines are sharply drawn and woe to any one bold enough to transgress them and "spoil the servants."

The same thought finds expression in another form. Whenever a discussion turns on an issue of social reorganization, some one inevitably remarks,—"That's all right, but then there is always work that some one must do," or "Who would do the dirty work?" Certainly the well-to-do have no intention of doing it, and their children, graduating from high school or college, are looking forward to the pleasant, clean, gentlemanly positions. If there must be scavengers, they certainly will not come from one of these families. What well-to-do mother would contemplate factory work for her daughter? Well-to-do girls use dress

goods and shoes made by other women who work in factories, but they themselves are far above factory work. They have been brought up to believe that they should pay some one else to do such things.

The well-to-do hope to hire done everything that they dislike to do themselves. Their conception of life is not one that involves the exchange of product for product and of service for service. Rather, out of their income—derived it matters not how—they are planning to hire Peter to do it.

The same spirit finds its expression in many another form. Why play baseball if a half dollar will hire some one to play for you? Why compel children to study in a public school if they may be sent to private school where a teacher will "help out"? Professionalized athletics and vicarious education are the logical outcome of such an attitude. Men let Peter do it, not realizing that mere ability to pay will neither bear the burden thus laid on Peter, nor prove an adequate substitute for the spiritual loss to the shirker of responsibility.

3. THE NEAR-GRAFT SPIRIT

The hope of something for nothing, the chance of buying life in return for a money compensation, the search for a bargain in enjoyments and satisfactions has allured the world for ages. The philosopher's stone, the spring of eternal youth and the apple of life have been sought by countless thousands. To-day, pursuant of the same philosophy, men put it off on Peter.

There is a fond hope, lingering in the human heart,

that in some way Peter will be able to do it for them. Why not? Has he not been liberally compensated for his services? Yes, that is true enough, but can one's life be lived by another?

Meanwhile, the well-to-do gather servants around them, and pay for more and more services in the hope that life may after all be found in that way. In any case, they would hardly be expected to fetch and carry themselves! So the tasks of the well-to-do are piled on Peter's well-loaded back and the cost of living rises as the amount of service comprised in "living" increases.

4. THE MINIMUM OF SERVICE IN RURAL LIFE

Some idea of the distance which the well-to-do have traveled in their demand for service may be gained by contrasting the conditions now existing in rural and in city life. In the country, each man is more his own master and less some one's man. The farmer, to a very large degree, serves himself.

When our ancestors, in early colonial times, lived in small villages and in rural districts, they were their own servants and gloried in the fact. They were able to serve themselves and the capacity for self-service was a source of pride and satisfaction. The movement into large towns and cities overthrew the self-service idea in many of its forms. Families ceased to provide themselves with the necessaries of life. The milkman called; the baker called; the huckster called. Families patronized cows they neither owned nor milked; they are bread baked in the oven of another; and as for the truck-patch in which they had always taken

such pride, it was a thing of the country and of the past.

As towns and cities grew, services multiplied. There were not only the numerous tradesmen who supplied the things formerly made at home, but there were public service corporations who pumped the water, sent in the gas and carried passengers on the street railway. Upon these services the city folk depend for their existence.

City life also develops servants and servant types. The hired man or hired girl in the country were son and daughter of a neighboring farmer, or else they were "from over across the hill." The city servants in the United States are ordinarily of another race and of another caste. They are servants, eating downstairs, wearing servant liveries, ordered about and treated as servants, and in every way looked upon as inferior to the masters for whom they work.

The city man is not only dependent upon others for the services which he requires, but he is dependent on a group of servants who are distinctly servile in their attitude toward him. He is the master and they are "different."

5. THE SUBSTITUTION OF SERVILITY FOR MANHOOD

Manhood is a matter of equality. The phrase, "He is a man," carries with it admiration and respect. There need be no friendship, no acquaintance, no intimate knowledge of the person in question. If he stands straight and looks one directly in the eye, he is a man. Men respect those who are proved equals. Whether in a bout at arms, a play of wits or merely

in appearance and dress, equality is a prerequisite of friendly recognition. Birth, physical beauty or strength, mental acumen, position,—all of these things and many more, in terms of which the world judges equality or inequality, place men on a footing.

The city servant has nothing in common with his master except their common manhood. He must be respectful. He must know and keep his place. Belonging as he does, in a different class, he need never expect to regard himself as in any other class.

Masters are kind to their servants. They are considerate, thoughtful, sympathetic. They exercise toward them all of the forbearance that they would exercise toward the most cherished friend. Yet they regard them, as servants, a fact which it behooves the servants under all circumstances to remember.

Since servants are "servants," they cannot be equals. Under such circumstances, democracy is impossible. One thing alone remains,—a relation of superior and inferior, of higher and of lower that establishes a servant problem.

6. THE SERVANT PROBLEM

The servant problem is acute among the well-to-do women who marry. They are frequently ignorant of housework, and they must rely upon servants. Perhaps they are thoroughly acquainted with domestic science and art, still none of the neighbors does her own work; why should they? On the other hand, many women have avocations or vocations which they continue after they are married. To such, the housework is a mere incident, which they gladly leave to servants.

Meanwhile, the entrance of women into factory and store has drained the market of many of the women who otherwise would be servants. They prefer to work in the store, where they are on a basis of equality with their employers. There is in the store and the factory work no taint of servility. Even though it pays less than domestic science, it is preferable. The demand for domestic servants increases with the increase in the number of well-to-do families. supply of women who will do domestic work is cut down by the demand of industry. Consequently there is an unsupplied demand for good "help" which is a source of continued aggravation to the housewife and which constitutes the real domestic servant problem. The most independent girls will not enter the servile atmosphere of the kitchen.

This situation leads to an interesting paradox. The servant becomes master despite her servility. The mistress continues to regard her as an inferior. She looks upon her as an individual who belongs in a lower stratum of society. Nevertheless, the girl servant is in a position to command because girl servants are so hard to find.

The burden of servants is carried by masters and mistresses. There are instances, numerous enough, in which a mistress would expend less effort in doing work herself than she expends in the supervision of her servants. To such persons, the hiring of an additional servant always signifies the assumption of an additional burden.

The hope for the future seems to lie in the abolition of "servants." Servility and democracy are incom-

patible. Since the tendency of the time is strongly toward democracy, servility lies in the past,—not in the future. The diminution in the number of domestic servants does not involve a decrease in the amount of services. Indeed, the apartment houses and family hotels in which service abounds are in many cases free of servants. Finally a man's servant will be as much his equal as his bookkeeper or his head salesman is his equal. Science has cleared away the traditions of differences in mankind. It remains for social reorganization to complete the work which science has so ably begun.

7. Public, Personal Services

The newer aspects of the problem of service appear in the service which is rendered publicly, either free, like the service rendered by the city government in the form of fire protection, or for hire, like the service rendered by actors in providing public amusement. Both forms of service are free of the servility attaching to domestic service. Both are increasing at an extravagant rate.

The free public services rendered by the government are an accompaniment of the congested living which the present day city involves. City life leads to a multitude of public services for which the home was formerly responsible. The home at one time provided almost all of the amusement for the members of the family. For that amusement the family now turns to the amusement and recreation places which abound in every center of population. There was a time when people went to lunch at their own homes. The growth

of city life has made such a practice unusual, hence lunch rooms are opened on a vast scale. No blame attaches to the home for its failure to provide amusement and lunches. The change underlies city life.

Every one in the city accepts public assistance, and as a matter of course, uses public property. streets, the parks, the schools are thought of, not as "charity," but as the due return which the citizen may expect from his city. Social service has in no sense demoralized men and women by lowering their self-respect, but it has increased public expenses vastly.

8. THE INCREASE IN SERVICE OCCUPATIONS

Despite the failure of the classical economists to make good their distinction between productive and unproductive labor, there is, in the contrast, an element which is worthy of serious consideration. There is a kind of labor which provides the food, clothing, and shelter upon which all depend for their existence. There is another kind of labor which is occupied in providing society with the comforts and luxuries of The first class of labor is absolutely essential in any community. The presence of the second class ordinarily denotes a more or less advanced state of civilization. While not essential to physical existence, it vields those returns which convert mere existence into Labor engaged in the production of comforts and luxuries is a vital factor in civilization, but it cannot be increased unduly at the expense of that labor which is engaged in the production of necessaries.

Although this argument may sound highly theoretical, it has practical bearing of the most extreme importance. Here was a farm owner, who after trying general farming for several years, and being unable to make ends meet, had turned to the growing of flowers for the New York market.

"It was no use," he said. "I gave it a thorough try-out, and couldn't make expenses. On these flowers I clear a handsome profit."

The flowers, while very beautiful, were luxuries. The corn and potatoes which this farm might have grown, ceased to be and with them there disappeared a part of the supply of food upon which the community depends for its existence.

To what extent this illustration is typical; to what extent mushrooms have replaced wheat, and fancy fruits standard vegetables, no one can say. The change is occurring here and there. If it becomes general, its effect on prices of staple farm products will be marked.

There are numerous industries beside agriculture in which a similar transformation is taking place. The railroad hand is taken from the section crew, where he kept the road-bed in repair, garbed in a red hat, and posted in the station as a "porter"; the janitor dons a uniform, stands in front of the department store, and opens the doors of arriving automobiles; the big hotels are alive with flunkies whose sole duty in life is to see that patrons are given no opportunity to help themselves; hundreds of thousands of men and women have entered the teaching profession; middlemen abound; every great industrial center carries in its wake a mob of camp-followers who, in some more or less obtrusive manner, graft on the workers.

With perfect justice it is argued that these servants increase human happiness. There is no doubt that the vaudeville performance, the grand opera, the up-stairs maid, the polite floor-walker, and the assiduous schoolteacher increase human happiness. They may also increase human efficiency. Neither of those facts, however, has any bearing upon the statement that they are not engaged directly in producing the necessaries of life.

This oft-reiterated statement regarding the increase in the amount of luxury-producing labor is always met by the answer,—"to be sure the proportion of productive labor is decreasing. That decrease is made possible by the use of machinery and the augmented efficiency of labor. There are fewer laborers but they produce much more than they did formerly."

That statement may or may not be true. The development of machinery has unquestionably been phenomenal. Whether this development has been in proportion to the decrease in productive labor remains to be seen. Meanwhile, it is well to bear in mind the fact that a whole line of industries are engaged in making the machines which relieve the laborer, and that all of the people in these industries must be fed, clothed and housed by the producers of food, clothing and housing.

While it is impossible to measure the relation existing between the saving through machinery and the loss through the increasing proportion of non-producing labor (and it is beginning to look as though the real facts had been covered up by the employment at subsistence wages of large bodies of unskilled immigrants who have replaced the higher Americans in

many of the producing occupations) there can be little question that the burden of producing the food, clothing, and housing for the people of the United States has fallen on an astonishingly small number of shoulders.

9. SERVICE AND GROUP LIFE

Service is essential to group life. Men cannot live together unless they help one another. The specialization which makes of each man an expert and gives to each a work which he must perform adds greatly to the efficiency of the group. Each receives more because all are directing the efforts in the interests of each.

Service begets service. Only in its own coin may service be repaid. No one who fails to contribute a fair share to the work of the world has a right to expect aught save emptiness and waste in return.

The unrest of the well-to-do, the dissatisfaction with the returns that life brings them, is a frank recognition of this one thing,—that life cannot be bought for any less price than that of service.

The immense increase in the number of services for which the well-to-do expect to pay is one of the moving forces in the increasing cost of living. For them, money income is important largely because it will enable them to hire some one to do the unlovely work of the world.

10. THE DEMAND FOR SERVICES AS A BURDEN ON INCOME

The immense increase in the number of those who are rendering personal service must be paid for. The

actors, ball players, telephone operators, railway porters, bell-boys, and floor-walkers expect to live. They are employed to render service to the well-to-do. recompense for this service is added to the maintenance bill of society.

Simpler forms of life have given way before more complex ones. City life has replaced life in villages, towns and isolated districts. Increasing complexity of living means, among other things, an increase of service. Servility in service is menacing as well as costly. Service from equals does not threaten Democratic institutions, but it does heap up the costs of maintaining the community. Amusement is expen-Entertainment comes at high prices when it is provided by "talent." It may or it may not be true that men have more amusement and entertainment for the additional expenditure.

For the most part this unrequited service should be classed among the comforts and luxuries of life. The well-to-do believe that they cannot live without it, but the world knows better, because the world at large does live without it.

The world must learn that no one who is able to serve should idle. That any one should receive a return for services above the value of those services to the world seems inethical to the last degree. It is unquestionably vicious in its effects upon the idlers. is no less expensive to society.

Services must be analyzed and treated variously. Those services which are necessary to the continuance of group life, and most of the services which are performed in return for other services, will continue to increase in number and variety. The result will be increased satisfactions for every member of society. Those services which are, on the other hand, received, with no service given in return, constitute an obstacle to social progress of the first magnitude. As they increase in amount they fasten themselves as a permanent charge in the living costs of individuals and of society.

THE INCREASING USE OF COMFORTS AND LUXURIES

1. WHAT ARE LUXURIES?

EACH person has a definition of luxuries which suits his taste and his position in life. The South Sea Islander regards a pair of trousers as a luxury. In London they become a necessity.

The three words which are most usually employed to distinguish various kinds of goods and services are "necessaries," "comforts," and "luxuries." Necessaries are those things which are required to maintain physical efficiency. They include the essentials of physical upkeep, such as simple clothing, plain food, and a sanitary dwelling. Comforts are things over and above necessaries, which may be very generally possessed by people throughout the community. productions of good pictures are not necessary to physical efficiency; they may be cheaply obtained, however, and a house possessed of them is said to be comfortably furnished. The same thing may be said of any commodity which is not immediately necessary for efficiency, and yet which the ordinary man of family may secure if they so desire. Luxuries are things beyond the income of the great majority of people in a community. A grand piano is a luxury. The income of the ordinary family is too low to enable it to maintain efficiency, and at the same time have enough surplus to purchase a grand piano. A three-thousand dollar automobile is a luxury for the same reasons. Things become luxuries when they pass beyond the income-reach of the ordinary man.

Accepting these rather arbitrary distinctions as a working basis, it becomes apparent, first of all, that the question as to what things are luxuries changes rapidly from one period to another. When tapestries were first thrown upon the floor for lords and ladies to walk upon, carpets were a luxury. In the homes of the humble there were no floors save the bare earth. No American looks upon a carpet as a luxury. There are kinds of rare carpets which are luxuries, but carpets as floor coverings are within the reach of every one. Indeed, a house without carpets is generally considered below the standard of necessaries which any family may expect to maintain. The standard of luxuries changes because of improvements on the methods of producing economic goods.

There are various reasons for the purchase of luxuries. Some people buy luxuries because they yield comfort. Some people find in luxuries, such as art objects, the satisfaction of some taste. Another group of people buys luxuries because it is the thing to buy them, and they buy those luxuries which are in style. Expensive dresses are peculiarly in this class. Their value is only temporary; and it consists not in their fit or their comeliness, but in their likeness to the standard of a particular season.

Luxuries which are procured because they satisfy a certain standard of fashion or style are peculiarly subject to the effects of competition. Each person strives to set a standard of luxury above that of some other person. Each aims to excel. The triumph is thus in excelling and in possession—not in the intrinsic worth of the thing possessed.

Under such circumstances, the standard of luxuries can be forced up at a terrific pace. No one need enjoy what he has. No one need even appreciate the luxuries which he already possesses. He must have as many, or more, than his neighbor, and he must have them as new or newer in style than his neighbor. This competition leads to a contest in which the most liberal spender sets the pace. Spending depends on income. The largest income supplies the most luxuries. The pressure is intense. The competition is keen. Men and women sacrifice everything—even health—to make a showing which is on a par with that of the others. The weapons in this fashion-contest are the luxuries that one has at command.

2. RIBBONS AND LACE

The well-to-do spend vast sums on luxuries. In a very considerable sense their social position depends upon this expenditure. On the other hand, their education has led them to expect elaborate menus, fine clothes, and splendid houses.

The time has come when a very considerable amount of labor and capital is engaged in the production of comforts and luxuries. The manufacture of pianos and organs necessitates the employment of 41,882 persons, and a capital outlay of \$103,234,000; the manufacture of automobiles has enlisted 85,359 persons, and a capital investment of \$173,837,000; the capital in-

vested in the silk industry is \$152,158,000, and the number of persons employed, 105,238; the tobacco industry employs 197,637, and involves a capital outlay of \$254,660,000; the manufacture of all kinds of alcoholic liquors requires 77,779 persons, and is capitalized at \$771,516,000.¹ There are a number of less important industries producing such luxuries as billiard tables, artificial flowers and feathers, confectionery and jewelry, phonographs, soda water apparatus, and the like. Large and small industries alike require the investment of capital, and the employment of considerable numbers of people. The exact amount expended for luxuries is immaterial. The fact of the expenditure is alone significant.

The labor and the capital which are engaged in the production of luxuries obviously cannot be engaged in the production of necessaries. Were the available amount of labor and capital unlimited, there could be no objection to diverting it into any desired channels. Since both labor and capital, at any given time, are definitely limited in amount, their employment in one industry, or in one group of industries, virtually denies them to another.

3. The Redirection of Productive Enterprise

There are in America to-day numbers of people who lack the simplest necessaries of life. They have the desire to secure them. Income alone is lacking. When a readjustment has been effected which will, on the one hand, provide them with the income, and on

 $^{^1\,\}mathrm{These}$ figures are taken from the Census of Manufactures, 1909. See Appendix A.

the other, so increase the production of necessaries that these people may have an opportunity to secure them, it will be time to concentrate on the production of luxuries. That time has not yet arrived.

Ruskin insists, and with some apparent show of justice, that "in due time, when we have nothing better to set people to work at, it may be right to let them make lace and cut jewels; but, as long as there are any who have no blankets for their beds, and no rags for their bodies, so long it is blanket-making and tailoring we must set people to work at—not lace."

The growth of industries devoted exclusively to the production of comforts and luxuries, in full view of the misery and wretchedness which begs for the necessaries of life, is a serious charge against any civilization. It becomes doubly serious when, as in the case of the automobile industry and the talking machine industry, this production of comforts and luxuries increases faster than the production of life's necessaries. To be sure, these are new industries. At the same time they show with undeniable clearness the widespread demand for acceptable comforts and luxuries, thus bespeaking the satisfaction of the well-to-do.

4. THE CHARITY BALL

There is a deal of vile nonsense spoken on this particular issue. No one point in economics has been so flagrantly misstated as the results of expenditures for comforts and luxuries.

After diligent inquiry the well-to-do have made two

1" The Political Economy of Art," John Ruskin, Part II, Application.

answers (the reply, "Cannot a man do as he will with his own?" cannot be dignified with the title of "answer"). The first of these answers is,—"We exert ourselves in philanthropic ways for these people." The second is,—"We spend our money, and thus circulate it in the community." Both answers are legitimate subjects of analysis, since both are freely bandied about in every public discussion of the subject.

Pursuant of the philanthropic principle, good people organize various schemes for the uplift of their fellows. In all of the large cities charity balls are given. Vast sums are expended in decorations and in elaborate toilets. If, perchance, the affair clears expenses, the surplus finds its way into the coffers of some philanthropic institution. The patrons of the charity ball believe that it is charity. A fair-minded outsider cannot help seeing that the real beneficiaries of the charity ball are the people who attend, even though a few crumbs fall from their table to be snatched at by the needy.

There was recently given in a large city a bridge for the benefit of a home for destitute colored orphans. To this affair splendid ladies came, decked out in jewels and fine laces, paid the admission fee of a dollar, gazed covetously at the rich prizes arranged on a table in the center of the room, and then turned with avidity to the game. After two hours of intense play these ladies separated and returned to their comfortable homes, taking their jewels and fine laces with them. Each had played for a great stake. Many had lost; a few had won. They had done it all in the name of charity.

The charity ball and the bridge for destitute colored orphans are a form of make-believe charity that has deluded the world for ages. The patrons go because it is the thing to do. If they were charitably inclined they would exchange their splendid attire for sack-cloth and ashes, and give the cost of their extravagant clothes and jewels to the poor.

5. Spending or Prosperity?

"We spend our money and thus circulate it in the community." Does spending make prosperity? "Yes," you aver, "if it makes work." Put aside the "makes work" argument for the time being, and confine the discussion to spending.

What is spending? What but an act whereby a person, having an income, exchanges that income for things that will satisfy his wants.

There are many people in the community who still believe that the man who spends benefits his fellow men. Carry that philosophy to its logical conclusion and let one person in the community take all of the income and spend it. Would his fellows be benefited? It is true that no doctrine can fairly be carried to its logical conclusion. Nevertheless, it is a false doctrine which will not permit of some logical analysis.

At the present time one class in the community spends for another class. A vast bulk of income goes into the pockets of the well-to-do. This group directs its expenditures in a way to suit itself. It consumes wealth for comforts and luxuries, then consoles itself with the belief that spending benefits the community.

"But we circulate our money," argue the spenders. That is true; the spender does circulate money. Prosperity consists, however, not in the circulation of money, but in the opportunity which each enjoys to spend his income in a way that will suit his wants. Real prosperity involves spending by the people who want the necessaries and the simpler comforts of life. When the necessaries and comforts are supplied to all of the people, it will be time to consider whether the spending of surplus wealth by the well-to-do adds to social prosperity. Meanwhile, it is evident on the face of things that when the well-to-do buy automobiles and silk clothing, they exchange their income for comforts which they are to enjoy. The men and women who are engaged in the production of automobiles and silk clothing receive no higher salaries than the men and women engaged in the production of cotton cloth and delivery wagons. The mobility of labor is a guarantee against any material difference in wages between those who produce necessaries and those who produce luxuries.

A great part of the income of the community is spent for comforts and luxuries by the well-to-do. That expenditure means an increase in the production of luxuries and comforts. Were that same income spent for necessaries and the smaller comforts by the poorer people in the community, there would be an equally increased demand for necessaries and comforts. Spending involves prosperity only when the spending is done by people who are thereby obtaining the necessaries of life. Spending by the rich makes no increase in the individual incomes of the poor.

6. MAKING WORK IS MAKING WANT

The "making work" argument is frequently used, and as often abused. "When we spend," insist the luxury seekers, "we make work." In one specious sense that is true. Industry is carried on in response to demand. As people go in the market and offer to buy goods production is stimulated and new goods are produced. There is no real sense, however, in which the position is sound.

Suppose that instead of spending your money and "making work," you left it with the bank. Loaned out to some industrial enterpriser, it would then be used to build a factory, or extend a trolley line. Thus it would not only make work, but it would add to the wealth of the community as well.

The real fallacy in the "making work" idea lies in the belief that the using up of wealth is a good thing. Granted that he who makes work is a public benefactor, it necessarily follows that he who makes the most work is the greatest benefactor. Thus he who gives a dinner provides work for the butcher, the grocer, the gardener, and the butler. To this extent, he benefits society, while he and his friends gorge themselves with the dinner. They were not hungry when they sat down to eat, and the meal impaired instead of improving their health. Nevertheless, they made work for those who prepared the meal. The next day, instead of giving a dinner, mine host decides to tear down his house and build a larger one. By so doing he makes work for carpenters, masons, decorators, and all of those other people who are engaged in building. limit as a benefactor is not yet reached, however. He

lives in a city which he one day surveys from the top "What an opportunity," he tells of a high tower. himself. "I will burn down this city in order that I may make work for its people." He descends from the tower and burns down the city. The next day there is work for all and to spare. Has this man who ate a dinner which he did not need, and built a house which he did not require, and burned a city that he might make work for its inhabitants, really benefited his fellows? Certainly he has not. He is a real benefactor who adds to the wealth of the community. The wanton destruction of wealth, or the destruction of wealth which is involved in satisfying the wants of whims or fancies for those who are already satisfied with the things of life, is no public benefaction. Destroying wealth uselessly makes want, not prosperity.

There is a saying of momentous importance to the world,—"Do not grind the seed corn." If the seed corn is ground there will be no sowing; without a sowing there can be no harvest; and if there is no harvest the people will die of famine.

There is a saying of like importance to society,—"Do not deny the necessaries of life to the workers." If the necessaries are denied to the workers, then efficiency will be impaired; if efficiency is impaired, the production of things is curtailed; the curtailing of production makes less possible the provision of necessaries, and the vicious circle is perpetuated to the end of the chapter. There is no more essential principle in modern statesmanship than this of the vital importance of providing the necessaries of life to those who do the work of the world.

From the standpoint of the economist, or of the statesman, it matters not a whit whether any one has luxuries. All of the luxuries in civilization might be destroyed over night, and the machinery of life would continue as before. Deny the necessaries, however, and the world stops.

7. THE SOCIAL BURDEN OF INCREASING LUXURY

Whatever the final readjustments which ethical and economic considerations force upon mankind, this fact remains,—that increasing luxury constitutes an increasing social burden.

The people who enjoy luxury do not necessarily render a return to society in proportion to the income which is at their disposal. It is true that some men and women of large income have been largely serviceful. It is likewise true that with each passing year there are afloat in the community a larger body of mortgages, stocks, and bonds, and title deeds, by virtue of which the owner, in return for his ownership, may receive an income.

The holders of property are not necessarily idle. Among them are the leaders in the world's activities. The mere holding of property, however, to-day gives to the holder a right to live, if he so chooses, without rendering any return service at the expense of society. Other men labor. The property-holder gathers in the fruits of their labor.

The rapid increase in property makes it more and more possible for a certain number of persons to live on their property. They travel, spend, live splendidly. Their property titles buy them the comforts and luxuries which they enjoy.

Nothing can be consumed which has not been produced. If these live without assisting society in production, it necessarily follows that some others must be producing the wherewithal by means of which these live. For the luxury of a great part of the community, the remainder of the community is deprived of wealth which those who live in luxury enjoy. Thus, to a larger and larger degree, society pays the bill for the luxuries of a few of its members. The bill grows constantly larger with each passing year. That increasing bill is an item in the increasing cost of living.

THE ASCENDING SCALE OF NECESSARIES OF LIFE

1. WHAT ARE NECESSARIES?

THE definition of necessaries as those goods and services which are requisite for maintaining physical efficiency is arbitrary. There is, however, no definition which will meet with universal approval, and this one seems as well qualified as any for general acceptance.

The idea of efficiency, of living with high vitality and a full head of energy, carries with it good work and effective leisure. It gives to the income-earner a stock of energy sufficient to replace the goods and services which were consumed in creating that energy. Furthermore, it sets a standard upon which normal health and normal length of life should be attained.

2. The Expenditure for Necessaries

Public opinion, in particular that portion of public opinion which retains a vivid recollection of its Puritan ancestors, holds that this is an age of fearful extravagance. There is some ground for such a view. Wherever the eye turns it encounters signs of extravagant living,—expensive tours, gay clothes, gorgeous entertainments, and needlessly ornate houses. The well-to-do and the rich have set a pace of costly living that brings the ordinary citizen to his feet with a gasp.

The age seems extravagant, yet, if the truth could

be known, it would probably appear that the vast proportion of income spent by the American people is spent for necessaries, rather than for comforts or luxuries. Unfortunately there is no way in which the situation can be accurately measured. It is, however, worth while to note the immense preponderance of those industries which are apparently producing the necessaries of life.

There are two classes of industries that fall under the census data on manufactures. One deals with the production of capital goods, machines, tools, raw materials, and the like. The other deals with the production of consumption goods. It is in this latter class that the present interest centers.

One cannot say that an industry is devoted exclusively to the production of comforts and luxuries, or to the production of necessaries. Nevertheless, certain industries, such, for example, as the manufacture of cigar boxes, may well be classed as industries concerned almost wholly with the production of luxuries; while certain other industries, such, for example, as the production of butter, cheese, and condensed milk, may be regarded as creating the necessaries of life. For the great majority of industries the distinction is not absolute. Cotton goods may sell for ten cents, or fifty cents, a yard. Flour may be converted into French pastry or bread. Furniture may be for the kitchen or the exclusive draw-In spite of the obvious inadequacy of the classification, there are certain industries which may be generally regarded as producing luxuries, and certain other industries may be looked upon as producing necessaries.

Among the industries producing luxuries 1

The two industries which report the largest number of employees are the tobacco manufacturing, with 197,637 persons at work, and the manufacture of silk and silk goods, with 105,238 persons at work.

The value added by manufacture was

The three industries with more than a hundred million of capital were the manufacture of liquors, of tobacco, and of automobiles. The eight industries which may be described as large luxury-producing industries are automobiles, clock and watch, confectionery, jewelry, liquor, piano and organ, silk and silk goods, and tobacco. It will be noted that several of these industries, for instance, automobile, clock and watch, and silk and silk goods, are engaged in producing many goods that are necessaries.

The contrast between the number of large industries producing luxuries and the number producing necessities is sharp indeed. Among the industries producing necessities

¹ All of these figures are taken from the Census of Manufactures, 1909. See Appendix A.

Among these industries the value added by manufacture was

More than \$25,000,000 in 24 industries 50,000,000 " 11 " 100,000,000 " 8 "

The ten industries reporting the employment of more than 100,000 persons were boot and shoe, bread and bakery, men's clothing, women's clothing, cotton goods, furniture and refrigerators, hosiery and knit goods, slaughtering and meat packing, woolen and worsted goods. It must be apparent without further discussion that the number of important industries in which necessaries are produced is greatly in excess of the number which produce comforts and luxuries. Industry is devoted very largely to the production of necessaries. Comforts and luxuries form but a small element in the total of the country's purchases.

3. The Pressure of Civilization

The pressure of civilization is constantly creating new standards of necessaries and comforts. First new wants are stimulated in men; then the means are discovered for meeting these wants; and finally the wants are looked upon as wants for necessaries of life. The use of books and papers furnishes an excellent case in point. It is but a few centuries since books were written on vellum. Then the process of printing from movable types was discovered. Up to that time books had been a luxury, purchasable only by the very rich. From that time forward, book manufacturing has been cheapened through the introduction of cheap papers and efficient methods of printing, until books, papers, and mag-

azines are sold at so low a figure they are looked upon as one of the necessaries of life and intellectual growth.

The processes of civilization have added books to the list of necessaries. Culture and education have forced upon men a new want. The younger generation coming into the world is compelled, even against its will, to spend a large portion of its time perusing books which were undreamed of luxuries among its ancestors.

4. EDUCATION AND NECESSARIES

The most potent single force in changing the standard of necessaries is education. By means of education ideas and ideals of livelihood are advanced. More than that, however, education breeds democracy; and on that foundation the increasing standard of necessaries have been built.

Where a caste system prevails, where men recognize that equality is impossible, the standards of the different castes remain utterly different. The priest caste, or the governing caste, enjoys the first fruits of the earth. The lowest caste of agricultural laborers receives the barest pittance that will induce the soul to remain in the body. The lower caste may hate the higher, but it does not seek to emulate its standard.

Into the arena of caste-content, democracy throws the gage of revolt. Men are potentially equal, preaches the democratic spirit. No man has an inherent right to have more possessions than any other man. This one wears the ermine; his father was a wood-cutter. Yonder lady is decked with jewels; her mother was a charwoman. Not what our fathers had, but what we possess, be our glory under a democracy!

Wherever the democratic spirit is injected into a society of unequal income, discontent ensues. Ambition is stimulated. Men are taught to strive for a place at the top.

Granted the presence of unequal income—there is no society where incomes are equal—it follows that the more unequal the income, with a given democratic attitude, the more keen will be the competition for a place at the top. Similarly, with a given inequality of income, an increasing belief in equal rights will cause an increase in competition.

The incentive to competition for place in the United States has been education. Boys and girls have been stimulated to a belief in themselves and in their powers of success. They have been taught to look up and ahead. There was a place at the top, if they could but get there, and the top meant a large income to spend for many things.

The teachings of the public schools have caused a phenomenal rise in the standard of those things which are considered necessary. If the banker can have a suit cut to this year's style, why may not his bookkeeper, or the janitor of his bank, or the street-car conductor who rattles his change past the door? There is but one reply—"He should." Proceeding on that assumption, the men all buy suits that are in style. So, too, women in every social group consider it necessary on some occasions to wear white gloves. If it is necessary for my lady, why not for the girl who sells her novelties over a counter? Again there

is but one reply, and the white glove is universally worn. To be sure all classes do not wear the same grade of gloves. The effort to emulate is present, however.

The rise in the standard of those things which are considered necessaries is a part of the rise in the standard of civilization. Just as freedom and knowledge were at one time spread from the few to the many, so now the advances of civilization are made into a common heritage.

5. THE STORY OF A PAST GENERATION

Twentieth century Americans find it hard to realize how complete the change in "necessaries" has been during a few brief years. The family's diet has been augmented; the supply of clothing has been varied and increased; houses have been improved; and the number of things which a dollar will buy has risen almost beyond computation.

Only a few years have elapsed since Joseph Barton Felt wrote "The Annals of Salem," in which are described the living conditions of a typical New England town of the eighteenth century. He says of the houses,—"While oiled paper lighted the cottages, glass did the same for more convenient abodes." "Though in the first occupation of our soil, a few of the more distinguished brought a stinted store of carpets with them, these articles were not seen in the far greater portion of our better houses. Down to even 1800, but a small part of our common livers had their parlors ornamented with them. Every Monday, after washing, the floors would be scoured as white as

pine would allow them, in all regular establishments, and then the light blue sand, from the beaches of Gloucester and Ipswich, would be thrown on, in handfuls, so as to make circular and spotted figures."

The life of the New England farmer was simplic-McMaster thus describes his situation in 1784:-"The Massachusetts farmer who witnessed the revolution ploughed his land with the wooden bull-plough, sowed his grain broadcast, and, when it was ripe, cut it with a scythe, and thrashed it on his barn floor with a flail. His house was without paint; his floors were without carpet. When darkness came on his light was derived from a few candles of home manufacture. The place of furnaces and stoves was supplied by huge cavernous fireplaces which took up one side of the room, and, sending half the smoke into the apartment, sent half the heat up the chimney. His food was of the simplest kind, was served in the coarsest of dishes, and eaten with the coarsest of implements. Beef and pork, salt fish, dried apples and vegetables, made up the daily fare from one year's end to another."1

The wardrobe of the farmer was as simple as his living. Store clothes he never knew; the things which he used were of home make, or so near home make as to be homely in the extreme.

The living of the town laborer in the eighteenth century was wretched. "A man who performed what would now be called unskilled labor, who sawed wood, who dug ditches, who mended the roads, who mixed

1" A History of the People of the United States," John Bach McMaster, D. Appleton and Co., New York, Vol. I, p. 18.

mortar, who carried boards to the carpenter and bricks to the mason, or helped to cut hay in the harvest time, usually received as the fruit of his daily toil two shillings.

"On such a pittance it was only by the strictest economy that a mechanic kept his children from starvation and himself from jail. . . . A pair of vellow buckskin or leathern breeches, a checked shirt, a red flannel jacket, a rusty felt hat cocked up at the corners, shoes of neat's skin set off with huge buckles of brass, and a leathern apron, comprised his scanty wardrobe. The leather he smeared with grease to keep it soft and flexible. His sons followed in his footsteps, or were apprenticed to neighboring trades-The twentieth century workingman would think of himself as living in the depths of misery were any such standards imposed upon him as those accepted by men of his class at the end of the eighteenth century.

6. STATE AID FOR THE MULTITUDE

The increase in the number of things which are looked upon as necessaries has been phenomenal. Even more rapid has been the growth in the number of services which the state is expected to render to its citizens.

The change of the state from a predatory, profitseeking enterprise into an institution, the objective point of which is service, has loaded upon the shoulders of the state new burdens. The new state is the

¹ "A History of the People of the United States," John Bach McMaster, D. Appleton and Co., New York, Vol I, pp. 96-97.

servant of the citizens. Are there social wrongs such as child labor and overwork? The state is the agency depended upon to redress them. Is there a need for great social enterprises, such as the building of a Panama Canal, the reforestation of a state, the prevention of floods, or the inauguration of a program of land reclamation? The state is the agency depended upon to perform the service. The state is a servant which is each year assuming new responsibilities and duties for those who comprise it. The forms of state activity vary. The city protects against ill-health, fire, and disturbance. There are lighted and paved streets, parks, playgrounds, and public buildings. The city is a public enterprise, run for public service. The state governments and the national governments likewise render services.

Governments are expensive. During recent years there has been a rapid increase in public expenditures. In 1878, the expenditures of the United States Government amounted to \$4.98 per capita, or \$24.90 per family. During the next thirty years they rose to \$7.45 per capita or \$37.25 per family. For the state of Massachusetts an even greater increase has occurred.

The rapidity with which the amount of governmental expenditure has increased is due to the changes in the objects for which the government spends money. The various governmental departments—the Legislative Department, the Judiciary, and the like, show a comparatively small increase in appropriations during the past thirty years. Expenses for education, for chari-

¹ Report of the Massachusetts Commission on the Cost of Living, House Document No. 1750, Boston, 1910, p. 208,

ties, for commissions and boards and the like items have risen with remarkable rapidity. The original functions of government cost little more now than they did a generation ago; the cost of the social functions is vastly increased.

The cost of government has become a considerable item in the budget of the family. Averages are always unsatisfactory, yet there seems no other way in which governmental costs can be expressed. The Massachusetts Commission makes the following calculation of the costs of government to city dwellers in Massachusetts: 1

For national government, 1908 For state government, 1909 For municipal government, 1906	Per Capita . \$ 9.722 . 3.912 . 24.750	Per Family \$ 48.610 19.560 123.750
	\$38,384	\$191.920

This average would not hold for any given family. Nevertheless, it indicates the real extent of governmental costs.²

¹ Report of the Massachusetts Commission on the Cost of Living, House Document No. 1750, Boston, 1910, p. 210.

² The Massachusetts report contains the following explanation of the above figures (pp. 210-211):

[&]quot;It will be seen that including all county expenses and taking into account late increases, the actual cost of government to the average dweller in a Massachusetts city is not far from \$40, or \$200 for the average family (by the census of 1905 it was found that the average size of the normal families of the state was 4.44, but for convenience in computation 5 is the usual number taken) supposed to consist of five persons.

[&]quot; County expenses outside of Suffolk County average about 1 per capita.

The cost of living has risen for this reason among others. The people are expecting more service from the state with each passing decade. There are more services, and the services are more elaborate. This service, provided so lavishly on every hand, adds greatly to the final cost of living.

7. THE ASCENDING SCALE

There is an ascending scale of those things which are commonly looked upon as comprising the necessaries of life. Invention and discovery make possible more things. The existence of more things stimulates wants. Education leads men to believe that one is as worthy as another to enjoy the good things of life. From top to bottom of the social scale, the standard of necessaries has rapidly increased.

Nevertheless, it remains true that the well-to-do have pushed their standard ahead more rapidly than those farther down in the income scale have been able

"Town government in Massachusetts average to cost less than half as much as city government, so that to-day the total share of the town dweller in all costs, local, county, state, and national, is something under \$30 per capita,—probably about \$140 for the average family.

"The total revenues of the United Kingdom in 1908, national and local, averaged \$32.09 per capita, or \$160.45 for the family of five. President A. Lawrence Lowell, in 'The Government of Eng-

land,' 1909, said:

"It would seem that the burden of local taxation in Boston is not very different from that of the average county borough (in England), and it is probably less than in the larger English cities, where the rate is usually higher than in the smaller towns.'

"In France, the average of the total revenues, national and local, is about \$23,27."

to follow. There is no way in which such changes can be measured, but it seems clear that the contrast between the day laborers' life and the life of the well-to-do members of the community was never so great as it is to-day. It is not true that the poor are getting poorer. There has probably never been a time since the industrial revolution when the day worker received more things in exchange for his day's work. During the last hundred years the poor have grown richer—a very little richer, while the rich have grown richer at an unheard-of rate.

The standard of necessaries continues to advance. The stove has replaced the hearth; the granite kettle the iron pot; sugar has become a common thing in every house; well-made shoes are generally worn; glasses and tooth-brushes are insisted on in the schools. The well-to-do accept as a matter of course this increase in necessaries. The low-income family stands before it appalled. How shall its stationary income meet this increasing demand in the face of increasing prices? It is there where the rising standard of necessaries meets the rising price of necessaries,—there in the home of the low-income family that the high cost of living strikes hardest at that great bulwark of society called the common people.

$\mathbf{v}\mathbf{n}$

GETTING AHEAD

1. The Neighbors

WHEN the discussion of rising standards has been ended; when it is clear that families of all classes and particularly the families of the well-to-do are wanting more things and more services, and are enjoying more things and more services than ever they did before; when luxuries have been so plainly differentiated from necessaries that he who runs may read the writing,—after all it remains true that the people who count for most are the neighbors.

People have wants; they enjoy comforts and lux-It is the neighbors who suggest the wants and the neighbors who possess the comforts and the luxuries. If the neighbors possess them, there is no escape. One telephone in a new neighborhood of ten houses is the first step in ten installations. "It is so convenient, you know, and then, besides, every one is getting in a 'phone." The argument is unanswerable and the telephone company receives its order. We live for the neighbors as the neighbors live for us. We emulate their standards as they emulate ours. We court their approval and dread their censure, as they do ours. We are competitors, living so close to one another that each is able to keep a constant check upon the stock which the other is putting in.

There is no competition like the competition of neighbors. Economists write of the cut-throat competition of commercial life. It is generous rivalry compared with the havoc which one neighbor may make in a friendly group. The competition of industry is intermittent. There are price wars and truces. The competition of neighbors is continuous and ferocious. Men and women look constantly to the neighbors,—buy as they buy, wear as they wear, enjoy as they enjoy and exist as they exist. Taken in all of its aspects there is no form of competition so insidious, so omnipresent, so unrelenting as that of neighbors.

2. Some Forms of Social Emulation

The competition among neighbors may take one of many forms. They may compete, for example, in the education of their children. They may compare the child intelligence, child imagination and other of the special qualities which they believe their children to possess in a high degree. They may compete in their efforts to render service to the community, each family striving to beautify the surroundings of its house, and to be otherwise progressive in working for the interests of the neighborhood. All neighbors do not have children; all do not have improvable front yards but there is one thing which the neighbors universally possess,—economic goods. Goods therefore serve as a common denominator of social emulation. Whether in the form of necessaries, or of comforts and luxuries, goods are the social yardstick.

The frequency with which the goods test is applied in family competition passes unnoticed with the individuals who apply it. How common a thing it is to judge a family's standing in the community in terms of the parlor furniture, the clothes which the mother wears, the character of the curtains on the windows and other like objective tests. How often are men and women alike approved or condemned by the style or fit of their clothes!

The well-worn answer to the accusation that families judge one another on a goods standard is "Yes," admit the neighbors, "we really no answer. judge them by what they put in their windows, and by what they put on their backs. Of course we do. That is a perfectly fair standard of judgment. If a woman is a good housekeeper, neat and tidy, that will show on her windows. If a man is a self-respecting citizen, his self-respect will show in the cut of his clothes." In that answer there is this much truth. Society has preserved a goods standard of life until it looks at all life through the medium of goods. The standard is purely artificial. Among certain savages, the character of the tattooing on the skin determines a man's claim to a place in society. In such tribes the respectable citizens are the well tattooed citizens. Clothes and house furnishings are the tattoo of civilization. They are not the man; they do not even represent the man. They merely represent three things, -his income, his taste, and his bump of order. income, taste and bumps of order do not make up the sum total of life; they are merely the border of one of its garments.

Those who judge their neighbors by the goods standard have another argument—a social one.

"You should conform to this standard," they insist, because such conformity is fair to the neighbors. They have set certain standards. When they appear in public they wear hats and shoes, and dress in style. If you have any regard for their feelings, you will do likewise while you are in that neighborhood."

Such an argument is ingenuous but inconclusive. Go back one step, and ask why it is that the neighbors wear hats, shoes, and stylish clothes. Is it because they enjoy them, or are comfortable in them, or believe in them? Certainly not. They, too, do it for the neighbors.

The passage of time has witnessed the erection of a goods standard of competition among the neighbors. No one neighbor is responsible for the existence of the standard. All must follow it. Once in the vicious circle, the family is doomed. The neighbors do this. It is respectable. We owe it to ourselves and our neighbors to be respectable. Therefore we must do it too. So the argument runs, generation after generation, while men, deceived into believing that the standard which they assist in erecting and maintaining is erected and maintained wholly by the neighbors, continue to conform to the neighborhood standard of Furthermore, there is, in this "follow-myleader" conformity with neighbors' standards, not one element of real respectability. Indeed, some of the things, in which neighbors are followed, lurk in dark Both individual self-respect and conscience are frequently violated by doing as the Romans do.

The goods standard of neighborhood competition is not final. There are other standards such as physical

strength and skill; mental keenness; social vision and social spirit; sympathy and neighborliness by which men may be classed. These items of personal inventory are cast aside in the ordinary neighborhood estimate of men, and the question is still asked,—"What have they?"

Neighborhood competition may be largely eliminated. There are many ways of conducting life other than judging and rejudging. A philosophy is even now abroad which insists that men "judge not at all." Perhaps there is in that doctrine a grain of invaluable truth for a self-respecting age.

For the present, at least, the goods test yardstick continues to be employed by most neighborhoods. The constant application of the goods test leads inevitably to a desire on the part of individuals for the wherewithal to make a good showing. If men must be measured, they may at least put forward their best foot first. Suppose they have no best foot? Suppose they have few or none of those good things by which the world judges? Why, then, the obvious thing to do is to get them—quickly!

3. Cinch Jobs

The pursuit of goods, to satisfy one's own desire for comforts and the neighbors' critical tests of respectability and social fitness, leads easily and naturally to a belief that goods are the chief thing to be desired in life. Goods become objects of endeavor and since the way in which goods are ordinarily procured is through income, income is sought religiously.

The saying of the philosopher is changed until

it reads, "goods is the principal thing; therefore, with all thy getting, get goods." The philosophy echoes and reëchoes through the hearts of mankind, who straightway arise and set out in the pursuit of goods.

Goods are the end of effort. Men therefore seek the means, income, in order that they may have goods. Couple with this feeling the natural disinclination of some people to exertion, and there results the pursuit of einch jobs.

There is much skepticism abroad on the subject of cinch jobs. How many men and women in the community would be ashamed to take a job which paid a salary out of all proportion to the service rendered? How many, even though ashamed, would take it anyway? How few are those who would refuse it when the test of success is goods and the way to goods lies through income?

The community in which cinch jobs are sought by any large proportion of the people is linking hands with ruin and disaster. Only as the individual throws himself into the struggle with ardor and enthusiasm can the fight be well fought and the victory assured. The prevalence of the "cinch job" spirit in a community is a symptom of social degeneracy if not of individual demoralization.

4. SINECURE HOMES

The spirit of getting goods, of making a show without working for it, is not confined to men. It has fastened its baneful fingers on the home, where, particularly among the well-to-do, it plays havoc with home life. The counterpart of the cinch job for the man is the sinecure home for the woman.

Society preaches the sinecure home to each generation. Girls are taught to believe that the prime requisite in a man is the ability to furnish a comfortable home. His morals, his attitude toward life, his habits, his qualities are thrown into one side of the balance. Into the other side is thrown his income. the income is permitted to outweigh all other considerations. Mothers, deceiving themselves with the belief that they have the interest of their daughters at heart, cajole, flatter, plead, and insist, until the daughter yields or else, in desperation, throws over the whole idea of home life, and enters upon the pursuit of a More well-to-do girls are driven from home and home ideals into the world of affairs by the attempts of the parents to maintain the tawdry respectabilities of life than appear at first sight. The goods standard glitters attractively before the eyes of the seventeen-year-old girl. Its splendor pales as she nears twenty-five and does not shine out strong again until she reaches that uncertain age of maturity at which her earlier ambition and beliefs yield place to adipose respectability.

Well-to-do homes all over the country are sheltering women—wives and daughters—whose service to society can be summed up in the one word,—"eminently respectable." They serve not at all. They render in return for the many things which they enjoy nothing except obedience to the dictates of fashion and of morality. They move with the crowd, have a good time, play about, cause trouble occasionally, usually

pass unnoticed, despite their blatant attempts at display, and at last sink into an early senility without in any way detracting from the efficiency or progress of society.

Both the cinch job and the sinecure home are a social burden. If men and women live splendidly without rendering a return in service commensurate with the living which they obtain, society pays the bill. Whether this bill is big or little is beside the question.

5. THE ROAD TO ISOLATION

The unending competition for goods has left men with an unspeakable horror of isolation. They cannot bear to be alone. On the one hand, there is little or nothing about which they wish to commune with themselves. On the other hand, they have grown so accustomed to "showing the neighbors" that a life without neighbors to "show" is inconceivable. Even though, in their younger days, they were self-analytical, since they grew to manhood and womanhood they have had little occasion to understand themselves. They have even ceased to inquire what manner of men they Only there is a lingering suspicion that if they should stop long enough to knock at the door of consciousness, there would appear at the wicket an ugly, distorted, wizened face, the mere caricature of the being who once lived there. Sensing the presence of such a phantom, they are afraid.

Men and women whose lives have been fused and forged in the white heat of the life struggle do not care to face themselves because, as the years go by, they become more and more certain of what they would discover. There is no pleasure in facing a real self which is a leering mask, welded over the possibilities of what might have been.

The art of self-communion has died before the dread of self-revelation. To sit at rest under a shady tree; to wander alone for hours through the woods and under the stars; to paddle out over the shadowy depths of the lake, alone; to contemplate, and enjoy,—these are phases of life little known in the modern world. They are little known because they imply that dreadful task of facing things as they are and that still more awful necessity of facing things as they may be and will be. Men and women cling to their companions in order that their worst fears may not be realized.

Men dread isolation; seek madly to pile up this world's goods, and rushing into the market-place they crowd close among their companions, their souls crying aloud for succor and encouragement. After years of such a life, they awake to the presence of an isolation more frightful than any other which the world can conceive,—the isolation of the individual in a crowd, the marooning of a human soul on the island of goods which it has heaped together.

The road to isolation lies through a struggle for supremacy in which dead things are the insignia of success. He who would draw near to his neighbor must first bare his own soul to himself.

The struggle for goods is itself a bootless one. He who succeeds is hated, feared, cursed, flattered, and fawned upon. How shall he know that the many who hover about him are vultures awaiting the time when

there shall be a feast of carrion? He who fails has already passed out of life.

6. THE PRICE OF GETTING AHEAD

The struggle is frightful. Whether there is something or nothing gained, the income earner is called upon to foot the bill. As the contest grows tenser, the demand for funds grows more insistent. The earner fights like a fiend, laying down his hopes, his tastes, his years and his health on the altar of greater income. What though the struggle is endless? What though the ribbons and lace, the grand liveries and the costly furnishings are only the dross of home life? What though, underneath the veneer of his respectability, the spirit within the man tells him that the end of this battle is death? The demands cannot be ignored—the demands from the folks at home.

The people at home are trying to get ahead. Son is at college, buying his way into fame; daughter is in the gay whirl, buying her way to a husband; mother is in society, buying her way to a position, where she will be able to do the best by son and by daughter. Father pays!

All families do not sacrifice their dear ones on the altar of getting ahead. All families do not strive for futility. There are good things—many of them—coming out of Nazareth. Yet the well-to-do struggle for supremacy is, on the whole, a tragedy.

The struggle with the neighbors is omnivorous. It takes, in income, all that men have. Of strength and health it devours all that they possess. For a reward,

it leaves with them treasures already cankered with rust.

The standard of goods is raised, the cost of living is pushed upward. There are many, particularly among the well-to-do, who have fallen into line and are keeping the pace. They are paying dearly for their places, and so long as they seek satisfaction in the possession of things, they will continue to pay a higher and higher cost of life.

VIII

PRICE CHANGES IN THE NECESSARIES OF LIFE

1. RUNNING THE RACE ON NINE HUNDRED

THOSE who cannot pursue the phantom of social emulation feel the pinch of the rising cost of living none the less sharply. Whatever may happen to the luxuries of life, the necessaries must always be secured. The provision of "necessaries" is the problem that stares full into the face of the man who is raising a family on nine hundred a year, or less.

There are families in the United States living on less than nine hundred. Despite the languid inquiry of the well-off,—"How do they do it?" men and women are everywhere bringing families into the world, and raising them on that amount.

Incomplete though they may be, personal experiences will convince any thinking person of the general prevalence of under-nine-hundred incomes. Nine hundred dollars is about three dollars for each working day. How many men get such an amount? Does the baker's man or the butcher's helper, the motorman or the street laborer? Such wage figures as can be found seem to show pretty clearly that fully half of the men engaged in American industry earn less than \$600 per year, while three-quarters receive less than \$750.1

^{1 &}quot;Wages in the United States," Scott Nearing, New York, The Macmillan Company, 1911, Chapter X.

The great majority of the population is evidently living somewhere just above or just below the nine-hundred-a-year basis.

When families live on nine hundred a year, or thereabouts, they have extraordinary difficulty to make ends meet. Their struggle is a struggle for necessaries. For them the race is a race with malnutrition and insanitation. Families living on nine hundred a year therefore feel the increase in prices with aggravated keenness.

The changing form of American life bears on the nine-hundred-dollar family. The same changes which have built cities have placed the nine-hundred-dollar family in the cities. The same changes which have raised the standards of life for the well-to-do have raised them for those less favored. Income is in many cases no greater, and rising standards of American family life make the nine-hundred-dollar family dissatisfied. The real interest of the nine-hundred-dollar family does not lie, however, in changing standards, but in changing prices.

2. THE NINE-HUNDRED-DOLLAR FAMILY AND THE CHANGE IN PRICES

The ordinary family of three children living in a large town or city on nine hundred dollars must have its expenditures carefully planned if it is to live decently and get through the year without a deficit. Such a family spends about \$350 a year for food. A rise of twenty per cent. in the cost of food is equiva-

^{1 &}quot;Financing the Wage Earner's Family," Scott Nearing, New York, B. W. Huebsch, 1913.

lent to between seven and eight per cent. of the entire family income. Such a price change must be followed by a severe readjustment of expenditures.

While price changes are thus vital to the nine-hundred-dollar family, they are none the less interesting to the family on two or three thousand dollars a year which is spending from \$500 to \$800 on its food. For the well-to-do, price increases mean a decrease in the number of luxuries; for the nine-hundred-dollar family they mean a decrease in the comforts or necessaries.

3. THE GENERAL INTEREST IN PRICE CHANGES

The man on the street may not understand the radical transformation which has taken place in the home, the city, and the methods of making a living. He is fully aware, however, that during the past twenty years his best energies have been barely sufficient to increase his wages as fast as the increase in the prices of the things which he eats and wears. He does know that prices are high, with a marked tendency to go higher. He does know that a comparison between his grocer's book and his pay envelope, made twenty years ago and again to-day, leads him to believe that it is harder for him to get the same living now that he secured then. The man on the street knows these things, and knowing, he is dissatisfied.

Mere knowledge is not enough, however. Even dissatisfaction will prove ineffective in finding a remedy unless it is based on careful study. Why have prices advanced? Unless the man on the street can answer that vital question, he can scarcely hope to solve the cost of living problem.

It is not possible at the present stage of knowledge about prices to make final statements regarding the reasons for price changes. In the future, price changes will doubtless continue, as they have in the past, until their riddle is finally solved. Certain elements, like scarcity, that go to the fixing of prices, are fairly well understood. In the main, however, price changes are an enigma. The available price knowledge contained, for the most part, in state and Federal reports giving the bare price facts, is suggestive, if not conclusive.

4. THE PRICE FACTS

The difficulties involved in securing reliable and satisfactory price figures are very great. Wholesale prices may always be found with comparative ease; but since the consumer pays retail prices, and since wholesale and retail prices do not change in the same ratio from year to year, they are a poor makeshift for one who is seeking to find facts about the cost of the things which are bought over the counter. Another complication arises from the fact that retail prices vary from one town to another, and even from one part of the city to another.² Furthermore, the available retail price knowledge does not cover all purchased commodities. Although the workingman spends less than half of his income for food, the

¹ There are, of course, the elaborate theoretical discussions about prices. Based largely on hypotheses, they are philosophic, rather than scientific or prophetic.

² See Appendix D.

statements concerning the cost of living usually refer to food prices almost exclusively. This incompleteness of statement arises from the fact that practically no authentic figures are available to show the cost of rent and the retail prices of clothing, fuel, and light. To be sure there is some fragmentary material covering rent in small areas, and a few kinds of clothing; nevertheless, the really authoritative data on price changes relate to foods alone. Even in the case of food prices the figures are neither complete enough nor sufficiently extended in time to warrant more than tentative deductions.

Of recent publications which have dealt with food prices, the most extensive study was published by the Massachusetts Commission on the cost of living. Although a large body of data is brought together, the arrangement is poor, and the analysis inadequate. A recent report of the Washington Bureau of Labor Statistics² contains a short section on the cost of living in Washington, in which a comparison is made between the wholesale prices of food in 1890 and in 1910. The work seems to be carefully done. The reports of the Bureau of Statistics of New Jersey contain by far the most intrusive analysis of the cost of living. Fifty-two articles of food are selected, and during the month of June agents of the Bureau secure retail prices on this bill of goods in sixty-two towns scattered throughout the state, buying each year of the same tradesmen. Since 1890 the United States Bureau

^{1&}quot;The Cost of Living," House Document, 1750, Boston, 1910.

² Seventh Biennial Report of the Bureau of Labor Statistics, 1909-1910, Olympia, Wash., 1911.

of Labor has compiled statistics of wages and prices. Retail prices for this purpose have been secured in a manner similar to that adopted in New Jersey. Unfortunately, however, the number of localities selected has been so small in comparison with the entire country that the ultimate value of the data must be open to question. A recent bulletin states that "data from this report was secured from more than 650 retail merchants1 (651 exactly), from 168 coal dealers, and 61 gas "The (39) cities included in the report companies." are important industrial cities, representing thirty-two "Within the thirty-nine cities live one-fifth of the total number of people, two-fifths of the urban population, and approximately one-third of those engaged in gainful occupations (not including those in agricultural), in continental United States." 2 Further, the Federal investigation covers only fifteen articles of food, though these fifteen articles include twothirds of the entire food purchases by a workingman's family. Thus the Federal figures involve only a portion of food items, and only an infinitesimally small number of merchants. Neither is the selection of articles so valid as that adopted in New Jersey. Since the price data are collected for the purpose of comparison with wage-earners' incomes, the obvious thing to do would be to select those foods which wage-earners buy. This method has been followed in New Jersey;

¹In any one city of half a million there would be perhaps 1,800 retail food dealers—three times the total number covered by the Bureau in their entire investigation of the thirty-nine cities.

² Retail Prices, Bulletin 105, Part I, Wash. Govt. Print., 1912, pp. 5 and 6.

but note that the list of the United States Bureau of Labor includes among fifteen items three meat items—"sirloin steak," "round steak," and "rib roast"—but no other cuts of beef. As a rule, it is the cheaper cuts, and not these more expensive ones, that the wage-earner buys. So, too, their quotation is for creamery butter alone, although the wage-earner almost invariably buys the cheaper grades of butter.

5. WHAT HAS HAPPENED TO PRICES?

Whatever the dependability of the New Jersey figures, their method of collection certainly wins for them first place among the retail price statistics. They show, as do all of the other figures available, that since 1898 the prices of most food products have been rising, though the rate at which they have risen varies extremely. All of the articles included in the New Jersey list have risen about thirty per cent. Among the items, rice and oatmeal remained stationary; butter, wheat flour, beef, and pork rose very rapidly; while canned tomatoes and prunes rose slowly. The greatest increase is in bacon, which almost doubled in price.

Without going into further detail regarding price increases, it may be said that such facts as are available show that the prices of food have risen generally during the past two decades, but faster in some districts than in others. A very fair idea of the changes may be gained from a summary of four groups of figures relating to food prices. Two of the lists are for wholesale prices and two for retail; the periods covered are

¹ For additional figures, see Appendix B.

not exactly the same; the figures include different numbers of articles; yet the four sources show considerable uniformity.

[&]quot;All articles" have risen. An examination of the table shows that this rise is very unequally distributed. The percentage of increase is much greater in meats,

dairy products, and cereals, than it is in vegetables, fruits, and sugar foods. The only general deduction that can justifiably be made from the table is that sugar, vegetables, and cereals show the least increase in price, while dairy products and meat show the greatest increase. Collected by different methods and from different sources, the figures nevertheless point to the greatest price increase in the products which are secured directly from domestic animals.

6. THE KINDS OF FOOD THAT PEOPLE BUY

At this point it is customary to make a comparison between wages and the rise in the price of "all articles." A moment's reflection will convince the reader that such a comparison is not permissible. Some items are more generally purchased than others. The diet is not composed of a number of statistically compiled articles, used in like proportions; but of a number of articles selected because of necessity or tradition, and consumed in very different proportions. Meat, for example, forms a substantial part of the wage-earner's diet, while the sugar bill for the same family is but one-fourth as great as the meat bill. The fairest analysis of food costs is therefore made by comparing the prices of different kinds of food with the amounts of those kinds of food actually consumed.

The amount expended for different kinds of food is readily determined. Although it varies with nationality, it is roughly measurable. While the proportion of expenditure for meat and fish increases slightly with the increase in income, and the proportion of expendi-

¹ See Appendix E.

ture for cereals decreases slightly, the percentages expended by different income groups are remarkably uniform. One-third of the income goes for meat and fish; one-fifth for eggs, milk, and dairy products; one-fifth for cereals; one-eighth for vegetables and fruit; and one-twelfth for sugar and sugar products. A comparison between these data and the data in the previous table showing the increased cost of the various kinds of food shows that the most rapid price increases have occurred in the case of three food products which are most largely consumed. The rise in prices was led by dairy products and meats. These two items alone constitute more than half of the total food expenditure of the family under \$900.

The fact that those foods which are consumed in the largest quantities have shown, generally speaking, the greatest increase in cost, while the foods least used the least increase, cannot be overshown emphasized. Meats and dairy products, upon which the American is primarily dependent for the nitrogen element in his diet, have led in the increase. Washington Bureau of Labor Statistics comments on this relative increase as follows:1 "In the list of commodities which have advanced most rapidly are included such staples as rye, graham and wheat flour, rice, eggs, lard, beans, ham, bacon, and fresh meats, the average increase in cost of the above commodities for the period mentioned being seventy-two per cent. Scarcely any article has advanced more rapidly than wheat flour, which is undoubtedly our most important The commodities which food commodity. .

Washington Bureau of Labor, 1911, Op. Cit., pp. 39-40.

show the least increase in price are various kinds of canned and dried fruits, canned vegetables, canned fish, and similar articles, which would not be classed among absolute necessaries. Taken as a group they constitute but a small portion of the ordinary household fare." A similar comment is made by the New Jersey Bureau of Statistics.

In so far as food is concerned, the facts seem indisputable. Meats, dairy products, and cereals have led the increase in food prices. Meats, dairy products, and cereals are the staples of American diet.

7. PRICE INCREASES IN OTHER COMMODITIES

The figures showing the prices of shoes and clothing are very inadequate, largely because they are whole-sale prices. It is, however, interesting to note that the wholesale prices published by the United States Bureau of Labor ² show that the price of blankets between 1890 and 1912 rose about forty per cent. for cotton blankets, but only about ten per cent. for woolen blankets; that during the same period the price of boots and shoes rose between ten and twenty per cent.; that carpets increased an equal amount; that the increase in the price of cotton thread, yarns, and cloths varied from ten to forty per cent.; that all kinds of hosiery show a decrease in price of from two to forty per cent.; that underwear remained about stationary in price; that woolen and part woolen cloths for suits and overcoats

¹ Bureau of Statistics of New Jersey, 1911, Camden, 1912, p. 148.

² United States Bureau of Labor Bulletin 114, Wash. Govt. Print., 1913.

rose in price from ten to forty per cent. A careful study of these wholesale price figures shows a prevalence of small price advances. Among the sixty-five articles of cloths and clothing listed, twenty-two decreased in price; seventeen rose less than ten per cent.; eighteen rose from ten to twenty-four per cent.; and only eight rose more than twenty-five per cent. Price changes in clothing during the past twenty years are apparently not considerable. Certainly they are not in the same class with changes in the price of meats, dairy products, and some cereal foods.

For fuel and light, which is a relatively small item in the workingman's budget, the wholesale figures (1890 to 1912) show a decrease in the price of candles of ten per cent.; a decrease in matches of nearly thirty per cent.; an increase in coke of nearly twenty per cent.; and a slight increase in the price of petroleum. During the same period, anthracite and bituminous coal rose in price, the former for domestic sizes from thirty to forty per cent., and the latter from two to sixty per cent.

Granting the obvious incompleteness of such facts, it appears beyond any possibility of cavil that those food products for which the largest part of the food expenditures is made have increased most rapidly in price. In some cases (bacon, for example) they have actually doubled in the past two decades. The wage-earner, therefore, faces the fastest rise in the prices of those commodities which he has been taught to want most.

The future seems to hold no immediate hope, so long as the present method of price-fixing prevails. Irving Fisher, who has done so much work in this field, writes,—1 "Whatever the mutual adjustments of pricelevels between countries by international trade and the redistribution of the stocks of gold, I believe the world as a whole is destined to see for many years to come a rapidly rising tide of prices."

Confronted by this dark prophecy, the worker who has analyzed his possible wage increase may well turn from a social system which offers neither opportunity for any great advance in wages, nor any hope for a stay in the increase of prices, to demand in his most vigorous style that some speedy means be adopted to discover why prices are rising, and by what means a new adjustment may be effected.

^{1 &}quot;Will the Present Upward Trend of World Prices Continue?" Irving Fisher, Am. Econ. Review, September, 1912, p. 558.

IX

THE CAUSES OF ADVANCING PRICES

FROM EFFECT TO CAUSE

THE inquiring mind turns naturally from a summary of facts to an analysis of causes. Prices, particularly the prices of those things which enter most largely into the expenditure list of the average citizen, are rising. Should the situation remain unchanged, there is every reason to believe that prices will continue to rise. Why should this be so?

Much of the controversy over price increase has assumed that there was some one cause, or some chief cause, to which all of the change in prices could be ascribed. Ascertain this one cause, discover its solution, and the problem is solved.

The citizen living amid the infinite complexities of twentieth century civilization need not be reminded that the causes of social movements are multiple in their origin as well as in their action. There is no single cause to which any of the complex phenomena of modern society can be ascribed. To this rule the cost of living problem is no exception. There is not one cause, but there are causes for increasing prices.

The citizen of the twentieth century, living in cities and towns, and paying the prices for most of the things which he needs, is brought face to face with a situation that threatens the unity of his family and the maintenance of his standard of living. What action shall

he take to remedy the situation? Plainly, he cannot act until he is familiar with the facts in the case. from theoretical considerations, there is in existence a large body of economic facts which throw sufficient light on the general problem to permit of some suggested solution. The theoretical causes of the cost of living have been made the subject of elaborate analysis There remains the fertile field of and discussion. available facts, together with the deductions which may be made from them.

The forces which materially affect the cost of living may be roughly divided into three groups.

- Economic forces which operate on prices. 1.
- Artificial manipulation of prices.
- The increase in the cost of production.

Though this division is by no means final, and although the groups are not mutually exclusive, it is adopted because it affords the most workable classification of the elements which are apparently operating on the cost of living.

ECONOMIC FORCES AND PRICE CHANGES

Under economic forces fall those forces which arise from the nature of modern industrial society. Does the population increase as fast, or faster, than the food The old questions must be reopened; the old, old arguments must be restated; and some conclusion arrived at, because it has not been finally decided that the ideas of Malthus concerning the dangers of over-population were wholly visionary. Particularly here in the United States, which is each year the

Mecca of nearly a million immigrants seeking economic salvation in a new world, the matter may well claim attention. If population increases faster than the supply of food, the United States will ultimately be forced to import her food instead of producing it. Meantime, the prices will steadily rise under the pressure of increasing demand without a corresponding supply. The increase in the quantity of gold, in those countries which have adopted a gold standard, is generally believed to exercise an upward push on prices. No individual and no class of people is responsible for this increase, yet its effect on prices is none the less In the same manner, an increase in the proportion of labor which is engaged in rendering personal services to the remainder of society throws an additional burden on those laborers who remain in industry. Unless a compensating advantage arises through improved machinery or methods, there must inevitably be a rise in price to compensate for the additional labor. On the other hand, the processes of economic evolution, leading to big business as it exists to-day, place in the hands of a small coterie of men the power to fix a monopoly price on their output, within certain limits, well recognized by those familiar with monopoly value and monopoly price. The products will be sold to the consumer at a price fixed at a point which has been described by the very telling railroad phrase, "all that the traffic will bear."

3. ARTIFICIALLY INDUCED PRICE CHANGES

Economic forces place men in a position where they may charge monopoly prices. Are they doing it?

Have they been responsible for pushing up the cost of living through the exercise of their monopoly advantage? The popular opinion would not hesitate to make an affirmative reply.

There are many forces operating in the economic world which are far beyond the power of immediate control. Population increase, changing gold supply, discovery and invention of improved methods and processes-over these forces men may exercise but meager sway. Finally, clever plotting and planning will bend them to the service of mankind. For the time being they must be counteracted or offset, since they will continue to operate.

Artificial restrictions upon economic society, of which monopoly power is a peculiarly significant illustration, are in no such category. Although based on tradition, and entrenched behind bulwarks of financial power, they are a direct product of human activity, and as such they can be made the absolute creatures of human decision.

How different the two things appear when they are set side by side! New chemical processes, together with the discovery of new fields, greatly increase the available supply of gold. The effect of this increase in supply upon the prices of commodities will be commented on in detail. Suffice it to say that the increase in the amount of gold, other things being equal, does raise the price of other products. Over this increase in gold production man has no immediate control. To be sure it would be physically possible to secure an international agreement by virtue of which all gold mines could be placed under government control, and the supply of gold regulated. Such an outcome is theoretically, but not practically, possible. Consider on the other hand a franchise monopoly under which a gas company delivers gas to a city at an exorbitant price. The voters of the city—a coherent, social unit—by registering the wish, can take the gas company's plant for public use, through the right of eminent domain, granted to them under an act of the legislature, or at the expiration of the franchise, they can place the plant under their own control. Any monopoly, socially granted, is subject to similar restrictions.

In so far as price changes are the result of artificially created monopoly, they may be modified directly by social action. That monopoly has played a part in price changes goes without question, though as to the exact part, some further discussion is necessary.

4. The Costs of Production

Revelations regarding excessive monopoly profits and the occasional deliberate wrecking of enterprises for private gain have placed the community in a state of mind to believe that, when prices rise, some one is "doing it." Such an idea is based on the assumption that the producer controls the conditions of production. No assumption could be more fallacious.

With the exception of a few well-favored concerns which own all of the productive machinery from the mine and the forest to the steel rail or the reaper and binder, few industrial enterprises are in a position to dominate the supply and the cost of things which they use. A patent monopoly, or some other form of privilege, may arm the producer with the power to fix

prices (within certain limits). The prices of the raw materials entering into the enterprises are wholly beyond their control.

The inability of certain enterprises to control the cost of production is well illustrated in the present struggle between the railroads and their employees. Time after time the employees have raised the issue of higher wages; time after time the railroads, fearing the force of public opinion, have submitted the matter to arbitration, rather than face a strike; time after time the decision has favored wage increase. The fairness or unfairness of the demands and the awards are not an issue. The fact remains that, wholly without the consent of the railroads, production costs have been increased by an increase in the rate of wages.

The cost of capital, or the cost of raw materials, may be similarly increased beyond the power of the producer to influence the change. The result may be an increase in price, which is due, not to the decision of the manufacturer or railroad management, but to cost increases wholly beyond their control.

There is no evidence that the interest rate is rising materially. In fact, over a long period, it has decreased. Nor have freight rates risen in such a manner as to materially affect the average producer. the other hand, land values, the prices of raw materials, and the cost of labor have apparently advanced. If this proves to be true, the producer must, for selfprotection, increase the price of his product.

Another element lies in an increase in production costs which is outside of the realm of any single producer. The distance between the producer and the consumer has been steadily increasing. This is true both as to distance, time, and intricacy of transaction.

As cities grow, as products are carried from more and more distant markets, a myriad of forces intervene. Raise lettuce in your kitchen garden and you are the preparer of the soil, the planter, the cultivator, the harvester, and the consumer. Buy lettuce grown in a distant truck section, and all of the multiple elements of present-day economic society intervene between producer and consumer. The railroads, the middlemen, the banks and other credit institutions, the retailer,—these in varied number and character must add an element to the final price. Perhaps they are necessary to society; perhaps they are superfluous. In any case they must be reckoned with.

5. A LINE-UP OF FORCES

One of the easiest things in public discussion is to fasten the blame for this or that economic or social disorder upon a person or a group of persons. One of the hardest things is to find any basis in fact for such action. Men naturally personify. All of their intellectual training leads them in that direction. Men seek always to attach personal responsibility, and hence at the first opportunity they point their finger at this individual or that one. Often careful study fails to show the faintest trace of individual responsibility.

There are economic and social forces always in operation, which are beyond the control of any individual. They are also very frequently beyond his power of

direction. However deplorable the effects of these forces, personal blame for their existence will not attach. The increasing interest in economic and social questions; the wide-spread recognition of the complex interrelation of forces; and the general acceptance of the doctrine that the economic and social, as well as the biologic world, is in a constant process of a change usually called "evolution," has shed a very different light on many questions.

A discussion of the cost of living leads directly into some of the most fundamental economic and social issues of the age. Above all else, it is not personal. To the last degree it represents a process,—a stage in development,—that must win the attention and serious thought of society if its solution is to be adequately effected. Nor is the matter to be decided by fine-spun theories. The very first thing to ask about the cost of living is,-"What are the facts?" After the facts have been decided there may still be room for the elaboration of theories, but until all available sources of fact information have been exhausted, theories must give place.

THE FOOD SUPPLY AND THE INCREASING POPULATION

1. WILL THE FOOD SUPPLY KEEP PACE WITH THE POPULATION?

No one realizes more fully than the student of economics the speciousness of the cry, "Not enough to go around," yet there are certain fundamental relations between the food supply and population which the investigator of the cost of living can hardly ignore. On the one hand, population constantly increases; on the other hand, the sources of food supply are rather definitely limited.

Man is the only animal which has thus far been able to increase irrespective of natural limitations. All other species are restricted by natural boundaries and prevented from multiplying by the limitation of the food supply. Man alone seems to be exempt from this rule. Arising locally he is now diffused over the whole surface of the earth.

Little short of phenomenal is the population increase of the Western World during the nineteenth century. The number of people in Russia rose from thirty-eight millions to one hundred and five millions; the number in France, from twenty-six millions to thirty-eight millions; the number in Germany, from twenty-three

millions to fifty-five millions; the number in Great Britain, from fifteen millions to forty millions; and the number in the United States, from five millions to seventy-five millions. Perhaps never before in the history of the world has there been such a rapid increase in population over so short a period of time.

No argument is necessary to demonstrate the limitations on the sources of food supply. The number of square miles of fertile land has been measured, and for the most part appropriated. To be sure, intensive cultivation may replace the present desultory agricultural system so prevalent in the United States. Nevertheless, intensive cultivation involves an enormously large outlay of labor power. Machinery and large scale methods dispense with this labor power, to a certain extent, while they decrease the food yield per acre to an alarming degree. The population is increasing rapidly. There are definite limitations on food supply. The increasing population means an increasing demand for food. If the demand increases while the supply remains stationary, a rise in the price of food products is inevitable.

2. Population Increase and the Meat Supply in the United States

During the latter part of the eighteenth and the early part of the nineteenth century the population of the United States doubled by natural increase in a little less than twenty-five years. During the latter part of the nineteenth century, however, the entire increase due to birth rate and immigration combined has not been nearly so great. For instance, between

1820 and 1850 the population increased almost two and one-half times (from nine millions to twenty-three millions); between 1840 and 1870 the increase was slightly more than doubled (from seventeen millions to thirty-eight millions); between 1860 and 1890 the population doubled exactly (from thirty-one millions to sixty-two millions); and between 1880 and 1910 the population fell considerably short of doubling, since it was fifty millions in 1880, and only ninety-two millions in 1910. There is still, however, an increase of population in the United States equal to approximately twenty per cent. for each decade. For the purposes of this discussion it will be sufficient to remember that from 1860 to 1910 the population of the United States trebled, increasing from thirty-one millions to ninety-one millions, and that from 1880 to 1910 it just failed to double.1

Contrast with this increase in population the increase in the production of certain important food products. First of all take meat, for which the workingman spends one-third of his food budget. The meat supply is absolutely limited by the number of meat animals in a community. The figures showing the number of live meat animals in the United States show an alarming failure to keep pace with the increasing population. Between 1860 and 1910 the number of cattle in the United States doubled.² In 1860 there were twenty-five million cattle, and in 1910 there were fifty-three million. From 1880 to 1910, there was an increase of

¹See Appendix E.

² All figures in this chapter relating to increase in production are taken from the United States Census for 1910.

thirty per cent. in the number of cattle in the United The increase in the number of people in the United States is therefore much more rapid than the increase in the potential supply of beef. Bearing in mind the fact that dairying has increased very rapidly during the period under consideration, it becomes evident that beef demand has increased entirely out of proportion to the beef supply. During the fifty years from 1860 to 1910, while the population trebled, the supply of cattle merely doubled. Practically the same thing is true of sheep and swine, the two other principal sources of meat supply. There were twenty-two million sheep in the United States in 1860, forty-two million in 1880, and thirty-nine million in 1910. swine in 1860 numbered thirty-three million; in 1880, forty-nine million; and in 1910, fifty-eight million, showing a slight progressive increase. In no one of these cases, however, has the increase in the number of animals corresponded with the increase in the population.

The explanation of these facts is simple. First of all, the grazing lands in the West and South are being rapidly converted into cotton fields, apple orchards, and wheat farms. At one time these lands, situated far from railroads, were so cheap that grazing on them was profitable. Railroads developed the territory; the price of the land rose; the landowners discovered that crops were paying investments; hence ranches were cut up into farms, and grazing disappeared.

The conversion of the ranches into farms increased land values at the same time that it increased the supply of cotton and grain. It made serious inroads on the source of supply for American cheap meat.

The facts regarding meat supply are therefore patent. Unless the imports of meat have increased with enormous rapidity, or unless the demand for meat has decreased phenomenally, there would naturally be a very greatly enhanced price attaching to meat products. As a matter of fact, there has been no increase in imports to correspond with the increasing population, and whatever decrease there has been in demand has been probably forced by the increased price.

3. THE SUPPLY OF DAIRY AND OTHER FOOD PRODUCTS

Turning now to dairy products, it appears that the production of butter was 460 million pounds in 1860; 808 million pounds in 1880; and 1,491 million pounds in 1899, 1,619,000,000 in 1909. The production of cheese increased from 103 million pounds in 1860 to 248 million pounds in 1880, 298 million pounds in 1899, 317 million pounds in 1905, and 321 million pounds The figures covering the increase in milk are in 1909. most unsatisfactory. In 1890 the production was five billion gallons, and in 1899, 7,266 million, and in 1909, 7,466 million gallons. At the same time the increase in the number of milch cows has been very slightfourteen millions in 1887, and twenty millions in 1910. The value, however, of these cows has increased enormously, totalling \$378,000,000 in 1887, and \$750,000,000 in 1910.

Egg production from 1880 to 1909 increased from 456 million dozen to 1,294 million dozen in 1899 and

1,591 million dozen in 1909. At the same time, the number of chickens increased from 102 millions to 296 millions.

The increase in the production of cereal crops has greatly exceeded the increase in the production of meat and dairy products. The wheat yield of the United States was 173 million bushels in 1860, 499 million bushels in 1880, and 635 million bushels in 1910. Corn, too, has increased. In 1860 the yield was 839 million bushels; in 1880 this yield had doubled; and in 1910, it had slightly more than trebled. The corn crop of 1880 was seventeen thousand million bushels, however, and that of 1910 was only 28,000 million bushels. Though the crop increased three times from 1860 to 1910, it failed to double between 1880 and 1910.

4. THE MEAT FAMINE

The figures thus far cited give an excellent idea of the increase in food production which has occurred during the half century between 1860 and 1910, and during the three decades between 1880 and 1910. Most discussions of the increased cost of living refer, however, to the twenty years beginning with 1890. It is during that period that most of the price records have been kept. Unfortunately, the Census statistics of 1890 have been open to serious question. Nevertheless, it will be of interest to consider briefly the changes in potential food supply between 1890 and 1910. During these twenty years the population grew from sixty-two to ninety-one millions (approximately fifty per cent.). During the same period, the number of cattle in the United States decreased from fifty-seven to fifty-

three millions; the number of sheep decreased from forty to thirty-nine millions; and the number of swine increased from fifty-seven to fifty-eight millions. In other words, during the two decades beginning with 1890, when so great an increase in prices occurred, the number of meat animals has decreased or remained practically stationary, although the population increased during the same time about fifty per cent.

Even more striking are the figures for a short term of years published by the United States Department of Agriculture (June 2, 1913) in a special statement. "The shortage in the supply of meat-producing animals in the United States is steadily becoming more pronounced, and it is evident that the country is facing an era of short production of meat. last six years there has been a decline of over thirty per cent. in the number of beef cattle in the country, while the population and the consequent demand for meat have increased. According to estimates of the Department of Agriculture, the beef cattle in the country on January 1, 1907, numbered 51,566,000, and at the beginning of the present year the number was only 36,030,000." The statement then calls attention to the fact that imports of animal products now exceed exports in value, that the Australian supply is primarily of beef and mutton, and that the number of cattle in Argentine actually decreased between 1908 "What wonder," the Department comments, "that the prices of meat have risen at a phenomenal rate?"

While there has been so marked a decrease in the meat supply during the past few years, the same thing

is not true of cereal crops, which in several cases show a smaller yield in 1890 than in 1880, and therefore a considerably greater increase between 1890 and 1910 than between 1880 and 1910. The corn yield, for instance, doubled between 1890 and 1910; the wheat yield increased from 399 millions to 635 millions (about thirty per cent.); the oat crop doubled; the rye crop increased from twenty-five to thirty-four millions; the barley crop from 67 to 173 millions; the buckwheat crop from twelve to seventeen millions; and the rice crop from 136 to 680 million pounds.

Only the most general figures have been cited in this statement, partly because more detailed figures throw no additional light on the situation, and partly because of the rather unsatisfactory character of the figures which are available. It should also be remembered that these statistics cover but a small proportion of the total consumption of an ordinary family. Nevertheless, in so far as they go, they indicate beyond any reasonable possibility of controversy, that during the half century between 1860 and 1910, the population of the United States increased at a considerably higher rate than the number of animals available for slaughter. The same statement holds true of the thirty years elapsing between 1880 and 1910. At the same time cotton, wool, cereals, and dairy products have in few cases increased more rapidly than the population, and have in some cases increased at a much slower rate than the population.

5. Is World Starvation Impending?

More than a hundred years ago, Thomas Malthus,

confronted by a somewhat similar situation, uttered his prediction of world famine. Since that time the use of new food areas (North and South America, South Africa, and Australia) has greatly increased the possible and the actual food supply. The time has come, however, when the last food areas have been discovered, and when, therefore, the food possibilities are rather definitely known.

Malthus was wrong in predicting immediate world disaster from overcrowding, although evidently he was right in predicting the encroachments of population on the food supply. In his time the absence of rail and ocean steam transportation, as well as the embryonic state of the factory system, made it impossible for him to see nineteenth century developments. Could he have witnessed the opening of the vast wheat regions in South America, the Mississippi Valley, and South Africa, had it been possible for him to imagine the enormous accretions of social efficiency which would come with the perfection of the factory system of industry based upon modern transportation devices, he must have revised his judgment regarding immediate calamity. Again, Malthus had no means of foreseeing

^{1 &}quot;An Essay on the Principles of Population," Rev. T. R. Malthus, 2d Edition, Vol. I, pp. 3-15.

² The per acre yields in the United States have lagged woefully behind Malthus's predicted arithmetic ratio. Corn, for example, showed a per acre yield of twenty-five bushels in 1880, and twenty, seven bushels in 1910. During the same period the per acre yields of wheat were twelve and thirteen bushels; of oats, twenty-seven and thirty-one bushels; of barley, twenty-two bushels each year; of rye, thirteen and sixteen bushels; and of buckwheat, fourteen and twenty bushels. During the thirty years, therefore, which

the phenomenal decrease in the birth rate which has occurred since 1800. Franklin described the average family of his time as a family containing eight children. Since then there has been a regular decrease in the birth rate, until the average family of the present contains not more than four children. Among the graduates of American colleges, and among the native-born population of New England, families number little more than two children. Writing at the end of an old epoch, Malthus's prophetic vision was necessarily limited.

Though Malthus's predictions were wrong, his ultimate philosophy was right. If population increase is more rapid than the increase in the food supply, the time must eventually come when starvation for some is inevitable; nor are indications lacking that in certain directions that time has already arrived. No one can read without real concern the aggregation of facts which Major Woodruff presents in his recent book on "The Expansion of Races." ¹

Major Woodruff first discusses "saturation," showing how the possible density of population is affected by rainfall, soil fertility, climate, and the advance of civilization. He then cites in considerable detail the evidences which America affords of super-saturation in

have elapsed between 1880 and 1910, which were theoretically, at least, the years during which scientific agriculture has had the most wide-spread vogue, the increase in the yield per acre of the principal cereal crops has been in the neighborhood of ten per cent. (The increase in the yields of rye and buckwheat are somewhat in excess of this figure.)

^{1 &}quot;Expansion of Races," Charles Edward Woodruff, New York, Rebman Company, 1909.

industrial districts. Low wages, insufficient housing, poverty, unemployment, the under-feeding of school children, and a host of other facts, supply him with ample material for his conclusion that there are alarming indications on all hands of the under-nutrition of a considerable portion of the population.

This under-nutrition, Major Woodruff hastens to assure us, is not due to an under supply of food, but to an under supply of nitrogen, the basis of life. He follows up the effects of the deficiency of the nitrogen diet in a very effective chapter, "Nitrogen Starvation, or the Modern Faminc," in which he attempts to show that the poor are starving to death none the less effectively, even though the immediate cause of death is stated as something other than the logical outcome of malnutrition.

Publicists and economists who have gone with endless detail into the causes of the increased cost of living, and particularly of the increased cost of meat, might save themselves many a theory and many an epigram, if they would bear in mind the patent fact that during the past twenty years, while meat prices have risen from sixty to one hundred per cent., there has been an increase of approximately fifty per cent. in population, with virtually no increase in the number of meat animals.

The same facts which lead to an increase in the cost of meat explain the considerable rise in the price of butter, milk, and cheese. The number of milch cattle has not increased as fast as the population, nor is this discrepancy offset by the increase in the milk supply per cow.

An analysis of the agricultural statistics of the United States would lead an observer, inevitably, to the conclusion that since the most marked failure of supply to keep pace with demand showed itself in the case of meat animals, the most extreme price increases would be recorded in the case of meats and meat products. Such is indeed the case.

No clear case can be made in the instances of other food products. It is not at all evident that the food supply is failing to keep pace with the population. For certain products the increase is more rapid than the demand for food; for other products it is less rapid. The rate of change at different decades is also unequal. It is nevertheless true that the food supply has not increased faster than the population.

The student who is seeking to explain the increasing cost of living need search no farther than the failure of certain forms of food supply to keep pace with the population, for one important factor in the situation. That it is the only factor no one can contend. That it is of immense significance in certain instances, such as the increase in the price of meat, seems equally apparent.

THE INCREASING GOLD SUPPLY

1. THE INCREASING GOLD SUPPLY AN ECONOMIC FORCE

THE changing agriculture of the United States, with its disturbing effects on the food supply, is an economic force of the first magnitude. It has a parallel, perhaps an equal, in the increasing gold supply.

None of the causes of the increasing cost of living has ever been accorded such general popular attention as has the increase in the gold supply. Malthus wrote of the relation between population and food. Henry George discussed land values. Here and there may be found fragmentary comments upon the increase in labor costs, the predatory activity of the trusts, and the changing character of occupations. More than all of these comments together, however, in the field of economic literature, have been the wide-spread analyses and discussions of the gold supply as a source of price change.

There must be a common denominator in terms of which the worth of all goods can be expressed; otherwise it would be impossible to carry on the business of exchanging commodities except by the very primitive means of bartering one commodity for another. A ton of straw would be given for two pairs of shoes; a bicycle would barter for a Morris chair. Each thing would have a value only in case it was wanted by some one

who was willing to give another thing in exchange for it. The need of a standard of value is apparent. Among most civilized people gold has been decided upon as the commodity in terms of which the value of all other commodities shall be stated. Men therefore say that they will exchange a pair of shoes or a bicycle for so much gold. Gold is the yardstick of commerce.

In order that exchange by gold may be simplified, definite units of gold have been fixed. For instance the government of the United States has determined that 25.9 grains of gold, nine-tenths fine, shall be a dollar. An improved device for extracting gold from ore might double the supply over night, but 25.9 grains of gold would still be a dollar.

Gold is a commodity in the sense that corn and hard coal are commodities. It is derived from nature through the use of labor and capital; it is bought and sold in the open market; it may be exchanged whether in the form of bullion or currency for other commodities. Under the old barter economy it actually was exchanged in nuggets or dust for food, clothing, houses, and lands.

2. SUPPLY AND DEMAND

One of the rules of economics seems to be that an increase in the supply of one commodity, other things being equal, will result in lowering its value. For example, if a shoemaker is making one pair of shoes in the course of a day's work, and a farmer is raising five bushels of wheat by a day's work, the shoes and the wheat will, roughly speaking, exchange for one another. Suppose, however, that through the use of a different kind of seed, no more expensive than the

variety formerly used, the farmer is able to get ten bushels of wheat for a day's labor, while the shoemaker still produces one pair of shoes; then, presumably, the shoemaker will insist upon getting ten bushels of wheat for each pair of shoes. Though this illustration is in one sense fallacious, since value in exchange is not based wholly upon labor value, it nevertheless represents the general law of exchange, that an increase in the number of units of a commodity tends to lower the exchange value of each unit.

Since gold is a commodity, the theory which applies to other commodities should apply also to gold. Gold is the basis of the modern currency system. When any one says "A bushel of wheat is worth a dollar," he means, "A bushel of wheat will exchange for 25.9 grains of gold." As the amount of gold increases, the value of it in terms of other commodities will decrease, that is, expressed in terms of gold, prices will rise.

3. Money and Prices

Gold is only one form of money, though it is the basis of value. Silver and paper money are issued. By such means, the actual amount of money (currency plus credit money) circulated is vastly augmented. Professor Kemmerer, one of the most prominent champions of the quantity theory of money, writes,—"In spite of all the complexities of our modern industrial régime, general prices, other things equal, vary proportionately and in the same direction with variations in the money supply."

^{1&}quot; The Gold Supply and Prosperity," Byron W. Holt, Editor, The Moody Corporation, New York, 1907, p. 51.

Much modern business is done without the use of any gold, by means of checks and drafts, which are based on deposits of gold, and which are expressed in terms of gold. In practice, the number of dollars of credit transactions each year are many times greater than the number of dollars of gold transactions.1 Professor Fisher therefore changes Professor Kemmerer's statement somewhat, writing that "the price level in any community is proportional to the volume of the circulating medium, provided the velocity of circulation and the volume of business transactions remain constant." 2 Though Professor Fisher's statement alters the view-point slightly, it does not affect the reasoning. In both statements the same thought remains dominant,—an increase in the supply of a commodity, in this case money, decreases its purchasing power.3

So long as the amount of the circulating medium continues to increase, and Professor Fisher has shown pretty conclusively that it has been enormously increased in recent years by the increase in the supply of gold and in the use of credit instruments,⁴ the world

¹For the year of 1912 the total gold money in circulation was \$610,724,154; silver and notes, \$2,673,788,940; bank clearings, \$168,506,362,000. Bank clearings are the credit transactions which pass through the clearing house. All credit transactions are not so recorded. The six hundred millions of gold money may have passed through several hands during the year, but at best, it is a mere bagatelle when compared with the total credit transactions.

^{2 &}quot;The Gold Supply," Op. Cit., p. 35.

³ An interesting statement of Professor Fisher's analysis of this problem will be found in the *American Enonomic Review*, June, 1912.

⁴ See Appendix H.

may look forward to a continual increase in prices. Mr. Holt states the matter most concretely in this way: "During the last decade prices have risen about fifty per cent. . . . During this decade the world's stock of gold has increased fifty per cent. But in this decade many important countries have adopted gold as their standard of value, thus creating a demand for much of this surplus gold. Suppose, as is probable, that the world's gold supply should increase fifty or one hundred per cent. during the next decade, and suppose, as is also probable, that no important country should, in that time, change from a silver, copper or paper to a gold standard; is it not possible and even probable, that prices would advance even more rapidly than during the last decade? Suppose that, as some expect, prices should advance at an average rate of ten per cent. a year and that, in 1917, they should be 200 per cent, higher than now. Think what a revolution would have taken place in values." 1

Mr. Holt here states, baldly, what the leading exponents of the quantity theory of money assert more guardedly. Professor Fisher insists that the quantity theory is true "in the sense that one of the normal effects of an increase in the quantity of money is an exactly proportional increase in the general level of prices." On the preceding page he states that as a result of "a doubling in the quantity of money," "it follows necessarily and mathematically that prices must double." The following page carries an impor-

^{1 &}quot; The Gold Supply," Op. Cit., pp. xi.

² "The Purchasing Power of Money," Irving Fisher, New York, The Macmillan Company, 1911, p. 157.

tant qualification to the effect that "other causes" may offset the operation of the quantity theory. Throughout this discussion, however, Professor Fisher lays far more emphasis upon the rule than on the exception.

4. Does Gold Make Prices?

There can be little question that an increase in the supply of the commodity which is used as the basis of exchange value will increase the value of the other commodities for which this medium of exchange is given. Yet few, even of the most ardent advocates of the quantity theory of money, would go so far as to declare that "I believe that the two great causes (for the recent price increases), about equally important, are: The great increase in the production of gold, and consequently the expansion in the world's currencies; and 2. The increase in the use of checks, which are used as a substitute for money and therefore tend to have the same inflational result. In other words, I think 'inflation' may be used as the one word to sum up my explanation for the rise of prices during the last fifteen years-inflation of money and inflation of credit." 1

Professor Fisher, in applying his theory, makes a strong appeal to the holders of contract securities. "Let us illustrate. Take the savings bank depositor, say a servant girl who put one hundred dollars (\$100) into a savings bank fifteen years ago and now takes it out. It has grown to one hundred and fifty dollars

¹ An Address before the City Club of Philadelphia, by Prof. Irving Fisher, City Club Bulletin, Vol. VI, p. 265 (Feb. 17, 1913).

² Ibid., p. 266.

(\$150) by the accumulation at compound interest at four per cent. during the last fifteen years, and she says, "Oh, I have fifty per cent. more than I put in." But when she takes it away and tries to spend it, she finds she has not so much as she put in. Now, what does that mean, ladies and gentlemen? It means that she has been swindled out of all her interest by the depreciation of the dollar. In exactly the same way the bondholder has lost all his interest, only he doesn't know it. The reason that he doesn't know it is because he has been spending what he has called his income every year, but which really was depreciation in his principal. He really has been using up his principal, and he will find it out when he tries to spend his principal." Whatever the value of Professor Fisher's theoretical contention, at this point its practical aspects are open to a serious question, which "This general rise was raised at this same meeting. in prices does mean loss to the unfortunate owners of money, of gold mines and of gold bullion, and to the equally unfortunate holders of bonds, mortgages and promissory notes, these being payable in depreciating gold, but these aside why should the rest of us be seriously concerned? Why in particular should the poor man, the wage-worker, be especially interested? He has no surplus of depreciating dollars, he is not burdened with bonds and mortgages that are gradually shrinking in terms of wheat and cloth, possibly he has not even a savings account which will be worth no more in fifteen years than it is to-day. Why is he any worse off however much gold may go up or go down? This man surely should be in luck, but is he? This is the real problem we are up against, and about which even Professor Fisher had nothing to say! The fact is, as we all know, that the high cost of living bears hard on those of moderate means, it bears hardest on the poor man and is least burdensome to the creditor class, the bondholders and mortgagees who, by our theory, should be bearing the whole burden." ¹

Mr. Smith's delicate reference to "the unfortunate owners of money, of gold mines, of gold bullion," seems justified in view of the application which Professor Fisher makes of his theory. As Mr. Smith suggests, no one is particularly sorry for bullion owners. When all is said in this direction, it still remains true that theories may come and theories may go. The quantity theory may be proved or disapproved to the end of time. Meanwhile the property holding class prospers as it never prospered before, while the rising prices of food bear fiercely upon the vast majority of the industrial population.

The controversy over the quantitative theory of money is endless, with the weight of authority inclining toward the belief that money is a commodity; and that an increase in the supply of money will depreciate its value, and therefore increase the prices of other things when measured in money terms.

5. GOLD PRODUCTION

While those who are interested in the quantity theory of money pursue the argument, the serious stu-

¹An Address before the City Club of Philadelphia, by Prof. Irving Fisher, City Club Bulletin, Vol. VI, pp. 294-295. Letter from Mr. Marshall E. Smith.

dent of the problem must turn to the facts. Prices have increased; the amount of gold has increased. Is there a traceable relation between the phenomena?

The supply of gold has increased rapidly in recent In 1860 the amount of gold produced in the world each year was in the neighborhood of six million ounces, fine. This annual production was maintained with comparatively little variation until the wide-spread exploitation of the gold fields in Australia, South Africa and Alaska. These three sources of supply, combined with the older fields, caused a rapid increase in the total amount produced. In 1891, the annual production was six million ounces; in 1894, eight million; in 1897, eleven million; in 1900, twelve million; in 1903, fifteen million; in 1906, nineteen million; and in 1910, just short of twenty-two millions. The two decades from 1890 to 1910 have, therefore, witnessed an increase of approximately 260 per cent. in the annual production of gold.1

The rapid production of gold has greatly increased the total amount of gold in the community. The exact amount of this increase it is impossible to state, though some idea of it may be obtained from a comparison of the total amount of gold in the public institutions with the amount of increase minus the amount used in the arts. The estimate is made that in 1910 there were in the banks, public treasuries and in circulation, in the principal countries of the world, \$6,704,100,000 in gold. The figures for 1910 showed,—

¹Statistical Abstract of the United States for 1912, Washington, Government Printing Office, 1913, p. 797; also see Appendix I.

World's gold production \$454,703,900 Consumed in arts and industries . . . 176,608,200

Net increase in gold \$278,095,700

If these figures are approximately correct, the amount of gold in the financial world was increased in 1910 by 278 millions of dollars, or about four per cent.¹

6. Offsets to the Increasing Gold Supply

Against this large increase in the gold supply there are a number of significant offsets. There is more gold in the country but there are also more demands for the use of gold created by,—

1. Increase in the population.2

2. Increase in the volume of business.

3. Increase in the production of other commodities.

Furthermore, the total amount of gold in the world is not a fair test of its commercial significance, since, during the past twenty years, a number of countries have adopted gold as the circulating medium, thus increasing the demand for gold. Then, too, there has been a considerable increase in the use of gold in the arts. All of these factors tend to negative the effects of an increase in the supply of gold.

There is more demand for gold to-day than there was twenty years ago. The population has increased; but, chiefly, the volume of exchange (transactions involving the use of money or credit) has immensely increased. That is, the potential demand for gold is much greater. Unless there is some increase in supply

¹See Statistical Abstract of the United States, 1911, Washington, Government Printing Office, 1912, pp. 756-759.

² See Appendix G.

to offset this increase in demand, prices would naturally fall. Most important of all, however, the pro-

are more houses in the community, more steel rails,

duction of other commodities has increased.

more machinery.1 ¹ Some significant estimates showing the increase in the production of commodities other than gold are given in the "Statistical Abstract" (1912, p. 810).

WORLD'S DEVELOPMENT, 1850 TO 1910

inery.							
or s'birow to Vorld's Tos Lodi Morld's Tos (snoilling)						4,906.7	6,704.1
Morld's An- nucle Outhut of Gold (Iniliins)	44.5	127.0	123.0	106.4	118.8	254.6	455.3
nori gi noiliM) (2noT	4.7	7.2	11.9	18.0	27.2	40.4	65.8
Coal (Inition (enoT	81.4	142.3	213.4	340.0	466.0	800.0	1,141.6
Cotton (Militon Pounds)	1,435	2,551	2,775	3,601	5,600	6,247	9,326
-linA to soliM hoor (shnosuodT)	24.0	67.4	139.9	224.9	390.0	500.0	637.0
sissed mosts.	864	1,710	3,040	5,880	8,295	13,856	23,932
noiinludoA (enoilliM)	1,075	1,205	1,310	1,439	1,488	1,543	1,616
Year	1850	1860	1870	1880	1890	1900	1910

gold four times. Some of these figures, particularly those for visible supply of gold, are The population has increased fifty per cent.; tonnage of steam vessels has increased nearly thirty times; miles of railway twenty times; cotton nearly seven times; coal fifteen times; pig iron fifteen times; gold production ten times, and the total supply of little better than guesses. They are suggestive rather than statistical.

(Columns one to six, "Statistical Abstract," 1912, p. 810; columns seven and eight, "The Gold Supply," Op. Cit., pp. 76-79.)

The number of tons of coal, board feet of lumber. bushels of corn, and yards of cotton cloth produced each year has greatly increased. If gold is a commodity, set off in exchange against other commodities, it would have lost in value if the supply had remained stationary, because of the immense increase in the production of those things for which gold is exchanged. J. A. Hobson concludes a careful investigation of this proposition with the statement,-"It is clear that the increased output of gold within the last fifteen years, though adding very largely to the aggregate amount of gold available for purchasing power, must have exerted a comparatively trivial direct effect in raising prices. Whatever this direct effect may be, it cannot account for more than a small fraction of the actual rise in prices that has taken place." 1

Another element enters. Credit money has increased in amount.² Is credit money to be placed on a parity with gold as a commodity? It certainly is not a commodity. Shall it be so considered?

While more difficult to measure, the increase in the amount of credit money has probably been at least as rapid as the increase in the supply of gold. "Thus not only has gold become far more plentiful, but the credit currency based upon it in leading commercial countries has also enormously increased though the growth in the United Kingdom is much smaller than in Germany and the United States." At another point the author estimates that the increased use of credit in

^{1 &}quot;Gold, Prices and Wages," by J. A. Hobson, London, Methuen and Co., 1913, p. 29.

⁹ See Appendix H.

the United States is "about the equivalent of the rate of gold circulation." The combined increase in the gold supply and the increase in the supply of credit money constitute an immense increase in the circulating medium of the community.

Exactly how much of the recent increase in prices is due to the increase in the gold supply is not at all clear. Certainly the increasing of the gold supply in a more rapid ratio than the increasing of the other commodities for which it is exchanged tends to raise prices. What modifying influence the fact that silver, bank notes, and privately issued credit instruments, which are not gold, have on the situation must remain a matter of controversy.

7. THE INCREASE IN MONEY IS NOT THE SOLE CAUSE

Certainly the increase in the amount of gold and of credit instruments is not the sole cause of advancing prices. Can it be fairly insisted that the increase in the amount of gold is a dominating influence?

The writings of students and propagandists alike abound in statements about the "general level of prices," about "the price curve," and about "the movement of general prices." These statements presuppose that there is a level of prices in the same sense that there is a total amount of gold or of iron in the community. Professor Fisher, for example, formulates a definition of "general prices" in this way:—"There was no need of such a definition so long as we as-

^{1 &}quot;An Introduction to the Study of Prices," W. T. Layton, London, Macmillan and Company, 1912, p. 86.

sumed, as we have usually done hitherto, that all prices move in perfect unison. But practically prices never do move in perfect unison. Their dispersion would render impossible the statistical study of general price movements were there no practical method of indicating the general movement. A simple figure indicating the general trend of thousands of prices is a great statistical convenience." Such a figure is indeed, as Professor Fisher suggests, "a great statistical convenience," but is it a sound method of procedure? No one who has examined the wholesale price lists and observed that the products of land show an extremely rapid increase, while the products of manufacture show in many cases an actual decrease and in other cases slight increases, can believe that it is a valid generalization.

The extreme advocates of the theory that the increased gold supply is the principal cause of the increased cost of living, treat the dispersion of prices as an insignificant matter. The supply of gold has increased; prices have increased. Mr. Holt, for example, assumes that this increase over a certain period has amounted to fifty per cent., which he says is equivalent to the increase in the supply of gold during that time. Mr. Holt, in this statement, fails to consider one very significant fact, namely, that his "prices" are in one sense entirely meaningless, because they denote not the prices actually paid for commodities, but a mathematical abstraction known as an "average" which is based on actual prices.

Theoretically, if the amount of the circulating

1 "The Purchasing Power of Money," Op. Cit., p. 184.

medium is in any large sense a cause of the increase in prices, the prices of all commodities should have risen in approximately the same ratio. Suppose, for example, that the total amount of gold increased forty Then, all other things being equal, prices per cent. of commodities should rise forty per cent. Inventions, improved processes, unusual scarcity, and similar causes would modify the prices of individual commodities. Generally speaking, the rise would approximate forty per cent. in the great number of cases. When the prices of all commodities for the past dozen years are added together and averaged, some such result is obtained. If the problem is handled in Mr. Holt's offhand manner, this forty per cent. is set off against the forty per cent. increase in the amount of gold and the case is proved.

This unscientific method will not stand even the most cursory analysis. In the first place, the volume of credit, the rapidity of circulation, and the volume of business are left wholly out of account. In the second place, it is assumed that a certain thing-an increase of forty per cent.—has happened to prices. Nothing could be farther from the truth. In certain lines of goods the price advances have been very considerable. On the other hand, the prices of certain other commodities have advanced less rapidly, or have actually decreased. The same thing is true of labor, which, like any other commodity, should show a rise proportional to the increase in the gold supply. As a matter of fact, wages show nothing of the sort. Some have risen very greatly; others have decreased sharply. 'In short, the facts fail to bear out the theories which Professor Fisher and those who are supporting his contentions have so vigorously advanced.

8. THE FALLACY OF GENERAL PRICES

This statement needs for its support a reference to any authoritative schedule of recent price changes. Among food products, the prices of meats have increased out of all proportion to the increase in the prices of other products. Between 1890 and 1912, round steak increased seventy-five per cent.; pork chops, ninety per cent.; and bacon, one hundred per cent. During the same period the price of wheat flour rose twenty per cent.; of corn-meal, sixty per cent.; of fresh eggs, sixty per cent.; and of fresh milk, thirty-five per cent.; while the price of granulated sugar decreased ten per cent.¹ An even greater variation appears in the prices of raw materials.²

Wholesale price statistics show that certain commodities report rapid price advances. They are lumber, grain, meat, leather, petroleum, and coal. The scarcity of meat and leather products has already been explained. The growing scarcity of timber, of coal, and of petroleum needs no emphasis. They are among the rapidly disappearing resources. A price advance in these products seems inevitable. On the other hand, the prices of most manufactured products have risen only slightly, or have actually decreased. There is no general movement in the prices of com-

¹Bulletin 113, United States Bureau of Labor, Washington, Government Printing Office, 1913.

² See Chapter XIII.

modities. Some prices have risen enormously; others have fallen considerably. Prices have been varying in widely different ratios, while the increased gold supply has been the same for all commodities.

By a coincidence there is some correspondence between the increased gold supply and the increase in "average" prices. Gold is exchanged, not for "general commodities," but for individual commodities. When analyzed into prices for individual commodities the coincidence between the rate of increase in prices and in the gold supply is plainly disestablished.

9. GOLD MOVEMENTS AND PRICE MOVEMENTS

There is one further test to which the theory that the increasing gold supply is largely responsible for the increase in prices, may be subjected. If it is true that the general price level depends upon the gold supply, then there should be some correspondence between the movement of general prices and the supply of gold in the community. It is significant to note that no such correspondence exists. A proof of this statement will be found in a comparison between price movements on the one hand, and the annual production and total supply of gold on the other.

Prices do not vary with the supply of gold. During the years between 1890 and 1897, the annual production of gold almost doubled. The entire period was one of abnormally low prices, reaching their lowest levels in 1895 and 1896. From 1897 to 1900, the annual supply of gold increased only slightly, but the rise in prices was extremely rapid. On the other hand, from 1903 to 1907, prices rose, then fell again,

entirely independent of the almost regular increase in the production of gold.

The quantity theorists, in reply, urge that these short-time fluctuations are not subject to the gold supply influence, which operates only over long periods. That statement calls into question the price movements of the past century.

A study of the price movements of the nineteenth century, side by side with the increase in the production of gold, fails to show any close correspondence between the two. The nineteenth century price cycles—falling prices, 1820–1849; rising prices, 1849–1874; falling prices, 1874–1896; and rising prices 1896 to date—seem to have occurred independently of the curve of gold production.¹ Between 1854 and 1894 the yearly production of gold varied only slightly. During that time prices rose to 1874, and fell to 1896. During this period of static gold production there occurred one of the most marked price cycles of which history offers a record. There is, then, no marked historical correspondence between the rate of gold production and price fluctuations.

The same conclusion must follow from a study of the total amount of gold in existence. In 1850, it was estimated at \$1,606,400,000. This total has increased steadily, until 1858 at the rate of three per cent. per year; until 1870 at the rate of two per cent. per year; until 1893 at the rate of one per cent. per year; and since that time at an increasing ratio.²

¹ "Introduction to the Study of Prices," Op. Cit. Chart opposite page 157.

² "The Gold Supply," Op. Cit., pp. 76-78.

10. How Potent a Force is the Increasing Gold Supply?

There is no possible way of measuring the amount of circulating medium (gold plus all other forms of money and credit) during the nineteenth century. If such a measure were possible, there is no reason to suppose that there would be any more correspondence between the total circulating medium and prices than there is between the gold supply and prices.

There is here no intention to cast discredit upon the quantity theory of money. Its advocates are unquestionably correct when they assume that the exchange value of a commodity is affected by its abundance or scarcity. There has been an increase in the supply of gold. All other things being equal, this increase in the supply of gold should correspondingly alter the prices of commodities. All other things have not, however, been equal. A marked increase in population has outstripped the supply of certain raw materials. money has entered as a disturbing factor; there has been an enormous increase in the production of certain commodities which gold is used to purchase. crease in the amount of gold is doubtless a contributing cause in the increase of prices, but its effect upon the rising cost of living has been seriously exaggerated.

The past two decades have witnessed an increased gold supply, and an increase in the prices of commodities. That the increase in the supply of gold has been an element in this increase, none can doubt. That it has been the only element, or even an element of preponderating importance, there is no evidence whatever to prove.

\mathbf{XII}

INDUSTRIAL COMBINATION AND MONOPOLY AND THE COST OF LIVING

1. ARE THE TRUSTS TO BLAME?

To the question, "What has been the chief cause of the high cost of living?" probably three people out of four would give an offhand answer, "The trusts." It is taken for granted that the trusts are the chief offenders—the most arduous "price-boosters." When an increase in the price of any commodity is announced, the papers write a head-line in which the word "trust" features prominently. The very existence of high prices is looked upon as conclusive evidence of the presence of a trust.

No patent fallacy ever secured a firmer hold upon the public mind than has this belief in the necessary connection between price increases and trusts. To be sure there are trusts, and there have been, and still are, rising prices. To date, no one of the many efforts made has seriously implicated a large business, monopoly, or trust in a general effort to increase prices. A careful study of price changes during the period of trust formation fails to show any significant connection between trust organization and the increased cost of living. Indeed, there are several instances in which the products of trusts have decreased in price during the past twenty years.

There is, of course, another very obvious issue, namely, that the trusts have failed to decrease the prices of their products in proportion to their decreasing costs of production. This may, or may not, be true. The available facts furnish no conclusive answer on either side, but it very apparently has no bearing upon the relation between the trusts and the present increasing cost of living.

The connection so generally suspected between trusts and rising prices is largely a matter of coincidence. The modern upward price movement received its impetus in the same period (1896–1903) in which the wide-spread trustification of American industry took place. It is therefore easy to understand why public opinion should associate price increases and trust organization. The two events took place side by side, but in no sense can one be looked upon as the cause of the other.

Professor J. W. Jenks, who was the expert employed by the government in making the investigation of trusts under the Industrial Commission, has had as good an opportunity as any man in the United States to study the trust question in all of its bearings. His book on "The Trust Problem" gave the first results of his study of the effect of trusts on society. His later studies have been embodied in a number of carefully worked articles. Writing in 1910 under the caption "Do Trusts Make High Prices?" Professor Jenks has this to say: "On the whole it may be noted not merely from the prices first quoted in the table, but

^{1 &}quot;Do the Trusts Make High Prices?" J. W. Jenks, Review of Reviews, Vol. 41, p. 348 (1910).

also from the course of prices, . . . that the general trend of prices of most products since 1895 or 1896 has been strongly upward. . . . The study of the course of prices of special articles shows that a great industrial combination like the American Sugar Refining Company or the United States Steel Corporation, or the Standard Oil Company, which controls a large percentage of the entire output, may exert a very decided influence upon the market in the way of either increasing or lessening the prices or of steadying them.

"In certain instances at least the combinations have increased these prices beyond competitive rates, and presumably in some cases beyond what would be considered rates sufficient to produce a fair profit." There are, on the other hand, certain cases in which "the combinations have felt it wise to hold prices down and to maintain steadiness of prices throughout great changes of demand. Since a number of the great trusts were formed before the general rise in prices began, and since their policy of exploitation of the consumer has usually been greatest at the beginning, we could, indeed, not say that the late increase in prices is due to them, even though they have exerted steadily some influence toward making some prices high. The general conclusion must be that the late great general increase in prices cannot be ascribed to the trusts, especially the prices that mainly affect the cost of living, though they are probably responsible for a small part of it."

This statement is made at the conclusion of a very elaborately prepared article illustrated with a number of charts showing the tendency of prices for the different trust-made products. Professor Jenks's data seem in every way to warrant his conclusion. Since this article was published, a number of additional price figures have become available. All of these tend to substantiate the statement with which Professor Jenks concludes his article.

2. WHAT IS A TRUST?

The term "trust" is used in such a loose way that it is impossible to draw a line which will distinguish those businesses which are trusts from those businesses which are not trusts. Whether the word should mean power to regulate prices, or merely large size, has not yet been popularly decided. Meanwhile, a number of great business enterprises are generally designated as "trusts." In most cases these enterprises are concerned with the making of things used in every-day life. In many cases they produce their own raw materials from their own mines or forests. In any case, an answer to the question concerning the effects of trusts on prices can best be secured by an examination of the prices charged for trust-made Without attempting to define the term "trust," the prices of products manufactured by those industries which are popularly regarded as trust-controlled will be examined.1

3. THE TRUST ROLL CALL ON PRICE INCREASES

The oldest and by far the most notorious of the trusts is the Standard Oil Company, which was organized in

¹ All the prices here cited are taken from Bulletin 114 of the United States Bureau of Labor, "Wholesale Prices, 1890-1912."

1870. Since the time of its organization, the price of oil has tended steadily downward. In 1871 oil was twenty-five cents per gallon; in 1912 the price was about one-third of the 1871 price. Since 1890 there has been a slight upward tendency in the price of oil. Crude oil (the raw material which is not generally owned by the Standard Oil Company) has risen about seventy-five per cent. Refined oil for export and domestic use has increased about twelve per cent. On the whole, therefore, the Standard Oil Company has decreased prices very markedly since its organization; and since 1890, in the face of increasing prices for raw material, it has held the price of the finished product practically stationary. That the Standard Oil Company has made huge profits is a matter of record, but the facts show very clearly that these profits are the result of decreasing cost of manufacture; they have not come through the raising of prices to the consumer.

The Sugar Trust, like the Standard Oil Company, enjoys no enviable reputation; yet the price of sugar, like the price of oil, has not been materially increased in recent years. In fact, between 1890 and 1912 there is a decrease of about twenty-five per cent. It is very difficult to make any conclusive statement regarding sugar, because of the extreme fluctuations in prices from year to year. Granulated sugar sold in 1890 for a little more than six cents wholesale, and in 1912 for slightly over five cents wholesale. On the whole, the price of refined sugar has followed the price of raw sugar with remarkable fidelity. In neither case has the trust increased the cost of living by

rising prices; rather, it has tended toward price diminution.

Perhaps no recent combination of capital has attracted more attention than the Steel Trust, which was organized in 1901. An examination of the price of steel products shows that the only effect of the Steel Trust was to steady prices. The price of steel rails declined from \$166 a ton in 1867, to \$27.33 per ton in Beginning in 1902, the price was fixed by the Steel Trust and maintained at \$28 a ton. This price is considerably in excess of the prices for 1897 and 1898 (\$18.75 and \$17.62, respectively). With the exception of these two years, however, there is no record of prices materially below the rate of \$28 fixed by the Steel Trust. The price of steel billets was lower in 1912 than in 1901 by \$1.75 a ton; bar iron had decreased nearly \$5.00 per ton in price, while wire nails had declined from \$2.36 to \$1.74 per hundred pounds. Since the organization of the Steel Trust there has been a decrease, rather than an increase, in the prices of The trust proved to be a steadier, steel products. rather than a raiser, of prices.

There are a number of other trusts more or less widely known, whose influence upon prices does not require extended comment. Since the organization of the Tobacco Trust there has been a slight increase in the price of tobacco. Plug tobacco between 1890 and 1912 increased in price less than ten per cent., while granulated smoking tobacco rose twenty-five per cent. Nearly all of this increase in both cases was recorded, however, before the formation of the trust. Since that time prices have shown no material change.

Despite the wide-spread protest against the activities of the Paper Trust, paper products have decreased very materially in price. The average price of newspaper per pound was in 1890 \$.0382; in 1912, \$.0216. In the same way wrapping paper decreased from \$.0575 to \$.0488. On the list of wholesale price decreases between 1890 and 1912 there are few more extreme than the decreases in the price of paper products. Again the trust has lowered, not raised, prices.

The products of the Drug Trust show no general tendency. Between 1890 and 1912 grain alcohol rose over twenty per cent.; wood alcohol decreased fifty per cent. The price of lump alum and refined glycerin remained practically stationary. Muriatic acid increased twenty-five per cent. Quinine decreased to about one-half of the 1890 price. Opium rose very rapidly, nearly trebling in price. Most drugs do not show a material price advance.

The products of the Glass Trust are among those showing lowered prices. Glassware shows a uniform decrease in price between 1890 and 1912; plate glass decreased fifty per cent.; the price of window glass remained stationary. The Glass Trust, therefore, cannot be accused of raising prices.

4. Some Trust Products that Report Price Increase

The cases thus far cited, covering the prices of products made by the principal trusts, show without exception a progressive decrease, or little change in price. There are a number of cases in which the presence of a trust has made an apparent difference in the price of

the product. A careful study of the price of woolen cloth and clothing shows a number of increases, usually less than twenty per cent. This increase has occurred in the face of a decreasing price for wool. The Woolen Trust is producing a product which has showed regular price advances.

A favorite subject for trust manipulation has been the manufacture of proof spirits. Through various changes of fortune this trust has passed, but without materially altering the price of the product. In 1890 the average price of proof spirits per gallon was \$1.05; in 1912 the average price was \$1.36. During this period there was considerable variation in price, with a constant tendency to increase.

Boots and shoes have risen in price between 1890 and 1912. The increases for different grades vary from ten to thirty per cent. At the same time, the price of leather has risen about thirty per cent. This holds true for harness leather, as well as for shoe leather. In the boot and shoe industry, the price for the products has risen no faster, if quite as fast, as the price of the raw material.

The price of coal likewise showed an upward tendency. This is particularly true in the case of anthracite coal, the control of which is commonly ascribed to the Coal Trust. Here the greatest increase has been in chestnut coal, the wholesale price of which increased from \$3.35 in 1890, to \$5.28 in 1912. Broken egg and stove coal show increases slightly less than this. At the same time, the price of bituminous coal, which is not generally regarded as a trust product, has risen in certain cases more than fifty per cent.

5. THE TRUSTS HAVE NOT RAISED PRICES

Obviously there is little connection between the trusts and rising prices. Popular opinion to the contrary notwithstanding, most of the trusts have played no material part in increasing the cost of living.

Even among those trust-made products which have advanced in price there have been no very extreme price increases. As already indicated, there have been general price increases in all forms of products during the past two decades. Taking the trusts as a group, the prices of their products have risen less than the prices of commodities at large.

These facts, while relieving the trusts from any responsibility for the increase in the cost of living, do not in any way affect the quite patent fact that some of the trusts have reaped exorbitant profits through the conduct of the industries which they control. They have not increased prices, but neither have they decreased them in proportion to decreasing costs of production. Bulwarked by patent monopolies, franchises, and ample capital, they have acted as price maintainers, not as price raisers. This is, of course, a horse of another color; but it has a legitimate place in the trust stables.

The trusts have played no considerable part in the price increases of the past twenty years. Trust products have increased in price, as, for example, in the case of shoes, of meat, and of lumber; but in each of these cases the increase has been in the cost of the raw material. Revert again to the figures of price increase. Those products which are growing scarce (meat, timber products, and mineral products) have led the upward

march of prices. The well-organized, highly developed industries commonly known as trusts have had no material part in raising prices.

The Massachusetts Commission on the Cost of Living states its conclusion regarding the influence of the trusts on prices in these words: "The general conclusion must be that the late great general increase in prices cannot be ascribed to the trusts, especially the prices that mainly affect the cost of living, though they are probably responsible for a small part of it."

From what has been said it does not follow that a vigorous supervision over the activity of big businesses may not result in material price reductions. Such will probably be the case. In fact, progress lies in exactly that direction. Whatever the cause of the rising cost of living, however, the trusts generally have played little part in it.

¹ Report of the Massachusetts Commission on the Cost of Living, Op. Cit., p. 427.

\mathbf{XIII}

THE INCREASE IN THE COST OF RAW MATERIALS

1. Are Production Costs Increasing?

THE charge that they have increased prices is answered by many producers with the phrase,—"Increasing costs of production." Prices have risen, it is true; but there has been a rise in the cost of making goods which is, in some instances, much greater than the increase in the price of the product.

If it can be shown that the cost of production has increased, a corresponding increase in price is plainly justified. What are the facts in the case? ¹

The issue is confused by two elements which cannot be accurately measured. On the one hand, the grade of goods produced may not be exactly the same as the grade produced at some former time. On the other hand, the methods of manufacture may be, as in the past century they have been, greatly improved. If poorer materials or different materials go into products, the increasing cost of production may be in a measure affected. If the methods of manufacture are materially improved, there is no question but that there will be a consequent decline in the cost of production. Neither of these elements is measurable. Therefore both must

¹ See an analysis of production costs in one industry, Appendix F.

be looked upon, for the time being at least, as unknown quantities. Meanwhile, the question as to the cost of the factors entering into production may be made the subject of inquiry.

The production or making of any article is dependent upon three factors,—natural resources, capital, and labor. Without these three no productive enterprise can be carried on.

At the outset of the discussion, it may be taken for granted that the responsibility for increased costs of production cannot be laid at the door of higher rates of interest, or of higher costs of transportation. The cost of getting capital (interest) has not materially increased since 1890, although there seems to be no doubt that interest rate is tending upward. Transportation rates, another important item in production costs, have not risen to any considerable extent. Therefore, if there has been any increase in production costs, the responsibility for it must rest upon the cost of natural resources, or the cost of labor.

2. The Elements in Production Costs Vary

All producers must use land either directly, as in the case of the farmer and the miner, or indirectly, as in the case of the factory owner and office-building manager. The substance of the land or its location is essential to every productive enterprise. Increases in land values would therefore have the most apparent effect on the prices of those commodities coming directly from the land,—agricultural products, minerals, and timber. Those secondary industries, on the other hand, which are engaged in changing raw materials

into more finished forms, are less directly affected than the primary industries. The price of ore is one of the big elements in determining the cost of making pig iron; it plays no appreciable part in the case of a watch spring, which is essentially the product of labor. Between these two extremes lie a large number of industries, more or less independent of direct land value increases. While increases in land value would have a direct effect upon the prices of those products derived directly from land, they would affect secondary industries only as they affect the cost of the raw materials used in a particular industry.

The secondary industries are dependent upon a supply of raw materials which the primary industries create. Almost all forms of manufacturing may be classed as secondary industries. They take the pig iron, the lumber, the cotton yarn, and the woolen cloth, the leather, or some other semi-finished product, and utilize it in the making of the special product for which their business is organized. In the case of these industries, therefore (and be it said parenthétically that they are the industries which supply the food, shoes, clothing, tableware, and other goods which minister directly to the wants of the consumer), the question of greatest interest centers about the price of raw materials. Are these industries being charged more or less as the years go by for the products upon which their manufacturing processes depend? If the prices of raw materials have advanced to any appreciable extent, there is every reason to expect a corresponding rise in the prices of the goods which are sold to the consumer.

3. THE TRUTH ABOUT WHOLESALE PRICES

A general statement has been made and accepted very commonly regarding the increase or decrease of wholesale prices. For example, the United States Department of Labor in Bulletin 114 (page 15) publishes a chart showing the change which has occurred in all of the prices of all raw materials between 1890 and 1912. In 1890 the price index on raw-material prices was 115. This fell to 84 in 1896; rose to 133 in 1907; to 139 in 1910; and in 1912 stood at 149. Such a statement may prove mathematically of very great interest. Practically it is almost meaningless. Consider a case in point. During this period from 1890 to 1912, while the general level of raw-material prices rose from 115 to 149, the price of barley rose from 111 to 224; the price of choice cattle, from 92 to 176; the price of wheat flour, from 120 to 122; the price of woolen underwear, from 106 to 115; and the price of refined petroleum, from 112 to 126. On the other hand, the price of men's hosiery decreased from 133 to 98; of calico, from 117 to 100; of raw silk, from 131 to 86; of worsted yarns, from 124 to 118; of steel rails, from 122 to 107; of shovels, from 100 to 95; and of cement, from 119 to 97. This illustration furnishes sufficient proof that statements about a "general price level" are, on the whole, most misleading. During the period of twenty-three years from 1890 to 1912, the prices of some commodities increased, the prices of other commodities remained practically stationary, and the prices of a third group of commodities decreased. No accurate conclusions can therefore be drawn from a general

curve of the average prices of a large number of commodities. An analysis of individual prices alone will afford an adequate basis for conclusions.

The price index numbers used by the United States Bureau of Labor are based on the average price of the commodity in question from 1890 to 1899. This average, rather than the price for 1890, is taken, because the variations from year to year in the prices of some commodities are considerable. Thus the year 1890 might be a year of great scarcity for potatoes and of great plenty for wheat. The year 1891 or 1893 might be a reversal of this situation. Fairness, therefore, demands that prices over a series of years be adopted as a basis.

The index number is computed as follows: The price of cotton cloth may have stood at six cents a yard in 1890 and 1891; at ten cents in 1892, 1893, 1894, and 1895; and at twelve cents in 1896, 1897, 1898, and 1899. The average for the ten years would therefore be ten cents per yard. This average price, whatever it may be, is represented by the number 100. The price in 1890 would then be eight-tenths of 100, or 80; the price in 1892 would be ten-tenths of 100, or 100; and the price in 1896 would be twelve-tenths of 100, or 120. By using this index number the price movements for various commodities can be readily compared.

4. THE CLASSES OF RAW MATERIALS

The wholesale commodities for which the Department of Labor furnishes prices 1 may be divided into five groups:

¹ Wholesales Prices, 1890–1912. Bulletin 114, U. S. Bureau of Labor, Washington, 1914, pp. 93–94.

Farm products, Cloths and clothing, Lumber and building materials, Metal and implements, Miscellaneous.

There is a wide variation in the price movements in these groups. The farm products present an almost unbroken line of price increases. With the exception of sheep, which decreased slightly in value, all but two of the farm products listed by the Bureau of Labor increased more than twenty-five per cent., and seven of the twelve products increased more than fifty per cent. The following analysis shows changes in farm products between 1890 and 1912:

Prices Decreased	Prices Increased			
From 0% to 24% Sheep.	From 0% to 24% Cotton, Wheat.	From 25% to 49% Oats, Rye.	More than 50% Barley, Cattle, Corn, Hides, Hogs, Hops, Timothy hay.	

So far, therefore, as the slaughter-house industry, the milling industry, and any other industries dependent upon meat, cereals, hides, or hops, are concerned, the increase in the price of raw materials constitutes a formidable problem, amounting as it has during the past twenty years to an increase of more than fifty per cent. in most cases.

5. CLOTH AND CLOTHING

A glance at the following analysis of the prices of cloths and clothing will show an essentially different situation:

Prices	Decreased	Prices In	creased
From 25% to 49% Hosiery, Raw silk.	From 0% to 24% Calico, Shirting,	From 0% to 24% Broadcloth, Canton flannel,	From 25% to 49% Cotton thread, Drillings,
	Wool, Worsted yarn.	Ginghams, Overcoatings,	Horse blankets, Leather.
		Print cloth, Sheeting, Suitings, Ticking,	
,		White flannel, Woolen dress goods,	

Again few products appear in the column showing decreases,—there are six of them, all related to the textile industries. On the other hand, thirteen out of twenty-three items listed show increases of less than twenty-five per cent.; and four report increases between twenty-five and forty-nine per cent. No one of the articles shows an increase of more than fifty per cent. In so far as the food supply of the population is dependent upon the raw products of the farm, the phenomenal increase in retail prices is to be anticipated. In the prices of clothing, on the other hand, no such increase appears to be justifiable, since most of the raw materials of which clothing is composed do not show any considerable price advances.

6. LUMBER AND BUILDING MATERIALS

The third group of commodities, lumber and building materials, is in like case with farm products. There are only a few exceptions in this list of wholesale prices to the general rule that there has been a considerable increase in the cost of building material.

Prices Decreased		Prices Increased			
From 25% to 49%	From 0% to 24%	From 0% to 24%	From 25% to 49% 1	More than 50%	
Plate glass, Putty.	Cement.	Brick, Linseed oil, Lime, Oxide of zine, Pine doors, Turpentine, Window glas		Hemlock, Poplar, Rosin, Spruce, White oak, White pine, Yellow pine.	

The prices of cement, plate glass, and putty have decreased somewhat. Seven articles show slight increases. All of the forest products except turpentine, on the contrary, have increased in price more than twenty-five per cent. Hard maple and shingles fall in the class for which the increase has been from twentyfive to forty-nine per cent. The other timber products show a much greater rise in value. Hemlock, for instance, increased seventy per cent.; white oak, fifty per cent.; white pine, one hundred and twenty per cent.; yellow pine, sixty per cent.; poplar, one hundred per cent.; and spruce, seventy per cent. other timber products a similar rise in price is shown. Every industry which is largely dependent, either for building or for its supplies of raw material, on the lumber industry, has thus faced a price increase in the past twenty years equivalent to from fifty to one hundred per cent.

7. METALS AND IMPLEMENTS

The price changes for metals and implements are much less than for timber products. Indeed, of the twenty articles listed, thirteen show decreases in price, while seven show increases. Furthermore, the increases of the seven are comparatively small, only three—builders' hardware, sheet zinc, and pig-tin increasing more than twenty-five per cent.

Prices Decreased		Prices Increased			
From 25% to 49% Barbed wire, Bar silver, Nails, Steel billets, Wood screws.	From 0% to 24% Bar iron, Copper wire, Lead pipe, Pig iron, Quicksilver, Sheet copper, Sheet steel, Steel rails.	From 0% to 24% Copper ingots, Pig lead, Tin plate, Tools.	25% to 49%	Pig-tin.	

An examination of this schedule of changes in the prices of metal and implements shows that iron and steel products have decreased, while two of the three copper products listed have increased. It is therefore fair to conclude that the changes in the prices of metal and implements furnish no reason for a radical increase in the price of the commodities which are immediately derived from these articles.

The last group of commodities contains a miscellaneous collection of articles, most of which show a general price increase.

Prices Decreased		Prices Increased	
From From 25% to 49% 0% to 24% Manilla rope. Paper.	From o % to 24% Coke, Drugs and chemicals, Refined pe- troleum.	From 25% to 49% Anthracite coal, Bituminous coal, Cottonseed meal, Cottonseed oil, Para rubber, Proof spirits.	More than 50% Crude pe- troleum, Malt, Raw jute.

All of the fuels have increased in price, coal and crude petroleum showing a rather considerable rise. Crude petroleum, raw jute, and malt lead the increases. the fourteen items listed, eleven show increases, and nine of these show increases of more than twenty-five per cent.

HAS THE PRICE OF RAW MATERIALS INCREASED?

Such a showing of facts renders any form of summary most inadequate. One thing is very clear,—that it is impossible to say, offhand, that the prices of raw materials have risen or fallen. The variation in price change from sharp decrease to sharp increase is so considerable that no single statement can do justice to the situation. Even when grouped, the facts are difficult to classify. It is quite apparent in all five groups that the commodities which are directly dependent upon the land-i. e., farm products and lumber and building materials—are the leaders in price advance; that minerals and fuels have increased in some cases and decreased in others; and that the various other items, including cloth and some other manufactured products show in many cases a considerable decrease in price.

Have production costs been increased because of an increase in the cost of raw materials? In the cases of those materials which are derived directly from the land, there has been a general increase. Otherwise the producer, in most industries, has been compelled to pay an increase in the price of raw materials of from ten to twenty-five per cent.—seldom more, and frequently very much less.

XIV

THE INCREASE IN LAND VALUES

1. THE PLACE OF LAND IN PRODUCTION

THOSE raw materials which are most directly dependent on the land show the greatest price advances. Does it follow, as a logical deduction, that there has been a considerable increase in land values? Reason declares that such should be the case; what do the facts indicate?

Among all of the value increases reported during the past two decades, the increases in land value hold first place. There is no parallel in any other field to the advance in those land values upon which civilization must directly depend,—timber lands, fertile farm land, and land in great centers of commerce and population. Especially since 1896 land has advanced with astonishing rapidity. So complete has been the alteration of land values during a short period of twelve or fifteen years that it might be described as revolutionary, without doing any violence to language.

The early French economists may have been wrong in everything else, but they were clearly right in the contention that all wealth is derived originally from the land. Whether mine, farm, forest, waterfall or fishery be called upon to supply human wants, the material things with which these wants are supplied are invariably derived from nature's storehouse. Take what commodity you please, in its original form it was a product of nature.

2. TIMBER LAND VALUES

For ease of discussion, land values may be grouped as follows:

- 1. Timber land values.
- 2. Farm values.
- 3. City land values.

The analysis of raw material prices in the last chapter called attention to the unusually rapid rise in the prices of lumber. One naturally turns from this extraordinary increase in the price of timber products to inquire into the increases in the value of the lands from which timber comes. The Federal Government in the Report on the Lumber Industry takes up the problem of standing timber in very great detail. While recognizing the difficulty of making a definite statement regarding the extent to which timber land has increased in value, the writers of the report are nevertheless struck by the extent of the increase.²

Roughly, during the decade ending with 1907 or 1908 (the period immediately before the industrial depres-

¹ Mineral land values and the value of water rights are omitted from this discussion because of the impossibility of securing reliable data regarding them. See "The Increase in American Land Values," Scott Nearing, *Popular Science Monthly*, Nov., 1913, pp. 491–505.

² "The Lumber Industry," Part I, "Standing Timber," Washington, Government Printing Office, 1913, p. 214.

sion), the Federal investigation indicates that "The value of a given piece of southern pine taken at random is likely to have increased in any ratio from threefold to tenfold."1 The investigators found instances of even greater increases. In the Lake region "the general ratio of advance of timber value during the last ten or twenty years has probably been less than in the South. Perhaps the advance of any given tract, taken at random, in ten years from 1898, was most likely to be between twofold and fivefold." In the Pacific Northwest, where the development in lumbering has been comparatively recent, "a tract taken at random is likely to have increased in any ratio from threefold to tenfold in the ten years ending in 1907 or 1908." Here the proportion of extraordinary advances "is probably greater than in the South."

The rise in timber lands would therefore seem to have more than justified the increases in the wholesale price of lumber. Even in the older section, where the timber has been largely cut away, the increases have been rapid. In the newer sections, which have recently developed as lumbering regions, the rate of increase in timber land values has been little short of stupendous.

No student can turn away from these records of the increase of timber land values since 1890 without a feeling of profound wonder. Twofold, fivefold, tenfold increases in a decade are immense, even in a developing country. That the price of timber prod-

¹ "The Lumber Industry," Part I, "Standing Timber," Washington, Government Printing Office, 1913, p. 214.
² Ibid., p. 215,

ucts should have advanced rapidly in view of this tremendous increase in the value of timber lands goes without saying.

Timber is in a peculiar position, economically. A hundred years ago it was an obstacle to American progress; to-day it is one of its rapidly disappearing resources. The approaching exhaustion of the timber supply undoubtedly plays a large part in causing the upward movement of prices.

3. FARM LAND VALUES

Farm land values present no such unusual difficulties as those encountered in the analysis of timber land values. Farming is an established business. The best farm land of the United States is largely under cultivation. If properly pursued, farming does not exhaust the resources of the land,—rather it increases them. Hence, the increases in farm land values present an illustration of very normal land value increases.

The material dealing with the increase in farm values is by far the most accessible of all the data on land values in the United States, since the Bureau of the Census makes elaborate returns on the subject. Although these returns are open to some very obvious and often repeated criticisms, they probably represent, on the whole, a fairly accurate statement of the increase in the value of farm lands in the districts which they cover.¹

During the decade between 1900 and 1910 the value of all farm lands in the United States increased from \$13,058,000,000 to \$28,476,000,000,—equivalent to

¹ See Appendix J.

118.1 per cent. Not one of the nine geographical divisions covered by the Census shows any decrease in farm land values. The increases, however, vary extremely. The least increase (19.1 per cent.) is shown in the Middle Atlantic States; the greatest increase (313 per cent.) in the Mountain States. The largest total increase (slightly more than six billions of dollars) occurred in the Middle Western States, which gave a percentage increase of one hundred and fifty-eight.

4. THE INCREASED VALUE OF WESTERN FARM LAND

The total increase in the value of farm land for the whole United States was fifteen billion, four hundred and eighteen million dollars, more than thirteen billions of which is credited to that territory lying west of Pennsylvania, north of the Mason and Dixon line, and west of the Mississippi. In short, the great farm land value increases occurred in that section of the country from which most of the necessary food products are derived. An examination of the figures shows that of the twenty-two states outside of this area, none reports increases of more than two hundred per cent., while only eight show increases of more than one hundred per cent. Within the area (west of Pennsylvania, north of the Mason and Dixon line and west of the Mississippi) of the twenty-seven states, seven report increases of more than two hundred per cent., while nineteen of the twenty-seven report gains of more than one hundred per cent.

There is, to be sure, a partial explanation of these

immense Western increases in the increase in acreage. The number of acres devoted to farming purposes is greater in 1910 than it was in 1900. This increase is not, however, considerable. Although the population west of the Mississippi increased thirty per cent. between 1900 and 1910, the total number of farms increased only eighteen per cent., the total amount of land in farms only nine per cent., and the total amount of improved land in farms increased only twenty-nine per cent. If the reader will bear in mind that fact that the northeastern section of the United States is increasingly dependent upon the West for its food supply, the increase in the amount of farm land west of the Mississippi is less than might have been expected.

An appeal to the Census table showing the value of farm land per acre bears out this suggestion. Among the Eastern States the increases in farm land value per acre are comparatively mall,—less than one hundred per cent. in all but two instances. Among the states west of the Mississippi, on the other hand, the increase in value per acre has been immense—more than one hundred per cent. in twenty out of twenty-two cases, more than one hundred and fifty per cent. in ten out of twenty-two cases.

The total figures showed that the bulk of the increase in the farm land values in the United States between 1900 and 1910 occurred west of the Mississippi. The figures for increases per acre lead inevitably to the same conclusions, namely, that the farm land in the states lying west of the Mississippi has increased, during the past decade, between one and three hundred per cent. in value.

5. AN INSTANCE

The real significance of the increase in farm land values to the cost of living may perhaps best be gained by a consideration of one group of states upon which the United States depends largely for its food supply. The North Central States (Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas) contain only a third of the population of the United States, yet they produce fifty-nine per cent. of the corn, seventy-four per cent. of the wheat, seventyseven per cent. of the oats, seventy-five per cent. of the barley, and sixty-five per cent. of the rve grown in the United States. The country is therefore dependent for three-quarters of its cereal foods on these twelve states. Cereals constitute about one-half of the total value of all farm crops. In a peculiar sense, therefore, these states are the granary of the nation, and the relation between their production of crops and the value of their farm lands is one of extreme importance.

Under such circumstances, the enormous increases in land value which occurred in these states between 1900 and 1910 is of great significance. During that decade the rural population of the North Central States rose from 15,963,000 to 16,397,000, an increase of 2.7 per cent. During the same decade the total number of acres in all farms rose from 317,350,000 to 350,577,000, an increase of ten per cent; and the total number of acres of improved land in farms rose from 222,314,000 to 253,232,000 (thirteen per cent). Here is an increase in population and in acreage of about a tenth during the ten-year period.

A comparison between this increase in products and in land values is astonishing. The value of all farm property in these states rose between 1900 and 1910 from 11½ to 23½ billions of dollars. Land alone increased from 7,866 million dollars to 17,285 million dollars. The value of buildings almost exactly doubled during the period, while the value of implements and machinery increased by about four-fifths. While the population and area in farms remained practically stationary, farm land values more than doubled.

It will be argued, of course, that the increasing productivity justified the increase in valuation. examination of the figures proves this statement to be wholly unfounded. The acreage of cereal crops in these states was five per cent. higher in 1910 than in 1900, the number of bushels of cereals produced was slightly less than five per cent. higher, but the value of the cereal crop almost doubled (976 millions to 1,821 millions of dollars). The acreage in hay and forage increased twenty per cent; the number of tons produced increased by a quarter. The value of the product was 222 millions in 1899, and 396 millions in The dairy business shows no material increase 1909. in the quantity of product. The butter yield for 1900 was 811 millions of pounds; for 1910, it was 869 mil-The production of eggs increased by slightly more than a fifth. The amount of live stock on the farms in the North Central States generally decreased during the period between 1900 and 1910. There were three million less cattle on the farms; the number of swine diminished by nearly five millions; the number of sheep and goats decreased by a million and a half;

the number of horses and mules increased by a million and a half; and the number of fowls increased by thirty millions (twenty-five per cent). In spite of this general decrease in the amount of live stock, the values very generally increased, with the exception of cattle, where there was a slight decrease in value. The value of the swine almost doubled; the value of the horses and mules increased nearly 150 per cent.; the value of sheep and goats rose a quarter, while the value of all fowls nearly doubled. All of the crops produced by the North Central States were valued at a billion and a half in 1900, and at two billions and a half dollars in 1910.

6. FARM LAND VALUES AND FOOD PRICES

The facts indicate that in those sections of the United States from which the food products of the country are chiefly derived, the land values during the last few decades have increased at a very rapid pace, culminating in the decade between 1900 and 1910, with an increase for ten years of double, treble, or quadruple their 1900 values.

For manifest reasons, the increases in the values of timber lands were prodigious, yet in many instances they are insignificant when compared with agricultural land, which should yield an essentially stable value over so short a period as ten years. Instead it has fairly leaped into the field of rising values.

7. THE VALUE OF CITY LANDS

With the bulk of food products coming rather directly from the farms, the immediate effect upon prices

of the rapid increase in farm land values may be readily understood. The prices of farm products have risen. At the same time the land from which these products are derived has risen even more rapidly in value.

While farm land values constitute the chief concern of the territory west of the Mississippi, the northeastern section of the United States is interested primarily in city land values. Innumerable instances might be cited to support the contention that city land values have risen. One or two cases must suffice.

An effective study was made by the New York City Club (Homer Folks, Chairman of the Transit Committee) regarding the increase in land values resulting from the construction of rapid transit lines. Along the route of the New Subway, assessment values, as given by the Department of Taxes and Assessments, were taken for the year of 1900 on vacant lots. These were compared with the assessment values of 1907, the figures in each case representing one hundred per "To ascertain the proportion of the cent, valuation. increase in land value attributable to the building of the Subway, it was necessary to deduct from the total rise what might be termed a normal rise, or the increase that would have taken place through the natural growth of the city, without added stimulus of a new transit line." This normal rise was determined by taking the increase from 1893 to 1900 on the same territory. The study shows that up to 110th Street the increase in land values between 1900 and 1907 was about forty-five per cent. This equaled the normal rise previously determined. The Subway apparently

made no difference in this land, because excellent elevated connections already existed. From 135th Street northward the problem appears stripped of complications. "The aggregated rise in this land from 135th Street to Spuyten Duyvil was about \$69,300,000. The estimated normal rise of \$20,100,000 was therefore exceeded by \$49,200,000, "apparently due to the building of the Subway." This increase is one hundred and four per cent. increase on the value of 1900. A similar rise in the land values of the Bronx was shown. Between the Harlem River and Bronx Park, the increase in land values due to the building of the Subway was \$31,300,000.

The report goes on to state that, while the increase in land values above 135th Street, due to the building of the Subway, was \$39,200,000, the cost of building the Subway from this point to 230th Street was \$7,375,000, or but fifteen per cent. of the actual rise caused by the new line. Similarly, the increase in the Bronx land values of more than thirty million dollars was caused by subway construction costing \$5,700,000.1

These instances are typical of the land value increases which are so apparent in New York City. Other great centers of population, however, show similar conditions. Mr. C. B. Fillebrown, in his "The A B C of Taxation," cites some interesting illustrations of increases in the land value of Boston. For example, the land values irrespective of improve-

¹ Building of Rapid Transit Lines in New York City. A memorandum addressed to the Board of Estimates and Appropriations by the City Club of New York, October 2, 1908.

ments, "on both sides of Winter Street, including the estates on the Tremont and Washington Street corners, were, in 1898, \$61.57 per square foot; in 1907, \$97.50 per square foot.\(^1\) . . . The land in Winter Street, which was assessed at less than four dollars per square foot in 1850, was assessed in 1907 at one hundred and thirty dollars per square foot. During the fifty-seven years intervening, the income, above taxes, from the land, in rent and appreciation, has amounted to an average of one hundred and fifty per cent. annually on the investment of 1850."

Similar illustrations might be cited in endless detail, showing the rise of land values in American cities. Even the casual observer must admit the very obvious facts of land value increase. The one thing needful is some accurate measure of their extent.

8. A SEPARATE ASSESSMENT, LAND AND IMPROVE-MENTS

There are a few American cities in which a careful assessment of land independent of improvements has been made. In New York City, the land and improvements have been separately assessed since 1906. The Report of the Commissioners of Taxes and Assessments for 1912 (pages 20–23) gives the land value assessments in considerable detail. The value of the land alone for Greater New York was, in 1906, 3,367 million dollars, and in 1912, 4,563 million dollars. This represents an increase in the per capita value of land, from \$811 in

^{1 &}quot;The A B C of Taxation," by C. B. Fillebrown, Doubleday, Page and Co., New York, 1912, p. 56.
2 Ibid.

1906, to \$898 in 1912. Incidentally, the total value of all improvements in 1912 was only two billion, seven hundred and sixteen millions, or about three-fifths of the total land value.

The boroughs separately show a considerable divergence in the ratio of increase. In the Borough of Manhattan, for example, the increase in the value of the land between 1906 and 1912 was from \$1196 per capita, to \$1296 per capita. This represents a total increase in land value of more than five hundred million dollars. In the Borough of Bronx the per capita land value fell from \$771 to \$657. This decrease was due primarily to the fact that during these six years the population of Bronx was almost doubled. For this borough, the total land value increased sixty per For the Borough of Brooklyn, the per capita valuation rose from \$325 to \$450. The population increased less than twenty per cent., and the land value rose from 456 millions to 786 millions. The Borough of Queens, which is the least developed borough in Greater New York, shows an increase in per capita land value from \$338 to \$862; an increase of sixty per cent. in population and an increase in the total land value from 81 millions to 278 millions. The increase in the Borough of Richmond is very similar to that in Brooklyn.

Although the land valuations in New York extend over only six years, they show that during that time the total increase in the value of the city's land was about forty per cent., while in the newer sections of the city, notably in the Bronx and in Queens Borough the increase was about sixty per cent. Neither in their totals nor in the proportions do these increases compare with the increase in timber land value or in farm land values.

The land of Boston has been assessed separately from the improvements, at "the full and fair cash valuation." There has been no material addition to the area of the city of Boston during this time; in fact, the number of square feet of land taxed decreased from eight hundred and ninety-six million in 1876 to eight hundred and fifteen million in 1912. This decrease was due to the taking of land for streets and other public purposes. It is interesting to note in this connection that between 1896 and 1911 two of the twenty-five wards in Boston show a decrease in land value; one shows an increase of one hundred dollars; one shows an increase of twelve thousand dollars; while twenty show increases varying from one million to twenty millions of dollars.

The value of all land in Boston between 1887 and 1911 has increased steadily.² There is no year during the period that shows a decrease. In 1887, the land valuation was 322 millions. For the next two decades it was,—

1890 .				. \$365,548,000
1895.				140 005 000
1900 .				. 523,934,000
1905 .				. 618,642,000
1910 .		•	•	672,100,000
1911.			4	685,484,000

¹ Annual Report of the Assessing Department for the Year 1911, City of Boston, Printing Department, 1912, p. 46.

² Supra, p. 16.

Twenty-four years show a total increase of slightly more than 100 per cent.

The land values of Boston are therefore increasing at less than a quarter of the rate of those of New York. During the years for which comparison may be made (1906–1911), the land values of New York rose thirty-eight per cent., while those of Boston rose less than eight per cent. There are several cities,—Trenton and Newark in the East, and Milwaukee, Dallas, Houston and Seattle in the West,—for which land assessments are available. The land increase for the Eastern cities and in Milwaukee is at about the rate of Boston. For the Western cities it is more rapid, although it does not compare in rapidity with the increase in timber and farm land values.

City land values are increasing, -slowly in the East, more rapidly in the West. Each decade sees from twenty to one or two hundred per cent. added to the Much has been said and written regarding this increase in city land values. It is insignificant when compared with some of the increases in farm land val-Compare, for example, the increase in the land values of New York City with the increasing land values of the grain states of the West North Central group. The population of New York City is just under five million; of Iowa, North Dakota, South Dakota, Nebraska, and Kansas the total rural population is almost exactly the same as the population of New York During the years for which figures are available (1906-1912) the land values of New York rose from \$3,367,000,000 to \$4,563,000,000,—an increase of almost

¹ See Appendix K.

exactly one-third in six and one-half years. The total value of the farm lands (irrespective of improvements) in the states named was, in 1910, seven and a half billions of dollars. In 1900, this same land had been valued at two and a half billions. In the interval of ten years it had increased almost exactly five billions of dollars (about 200 per cent.). The total value of farm lands in those five states is now one and a half times the total value of land in New York City, and the rate of increase in the value of the land is four times the rate of increase in New York City.

Furthermore, New York represents the exception. The land values in most Eastern cities do not increase so rapidly. In Boston where land and improvements have been separately assessed since 1887, the land has increased a bare one hundred per cent. in twenty-five years. Two other Eastern cities, which have separate assessments of land and improvements, report increases of (Trenton 1906–1912) eight per cent. and Newark (1907–1912) fifteen per cent. Even the rapidly growing Western cities like Seattle, Houston and Galveston report increases in the assessment of land values of not over two or three-fold per decade.

9. INCREASING LAND VALUES AND RISING PRICES

The increase in the land values throughout the entire United States has been immense during recent years. Particularly since 1896 timber and farm land values have advanced rapidly. City land values, though less rapidly, have risen none the less surely. What the future may hold in store for a nation whose timber lands treble, and whose farm lands double, in value,

during a single decade, the student of statistics may not venture to prophesy. Whatever the influence of land values in the prices of products derived directly from the land, and it seems incontrovertible that some such relation exists, the past few years have witnessed an increase in land values of stupendous proportions—an increase that may well be a noteworthy explanation of the increasing cost of living.

xv

THE INCREASE IN LABOR COSTS

1. HAVE LABOR COSTS INCREASED?

A GENERAL impression prevails among the employers of the community that an increase in prices must necessarily result from the rapid increase in labor costs during the past few years. The frequency of labor union demands has confirmed the general impression that the wage rates paid to labor are increasing phenomenally. One of the reasons most commonly given for an increase in the price of a commodity is that since wages have been forced up, therefore there must be a corresponding rise in prices. All of these view-points are emphasized in the wide-spread discussion of the increase in wages.

An attempt to discover the extent to which wage increases are responsible for the increase of prices should be based upon a recognition of the fact that the wages of labor and the labor cost of a product do not necessarily vary in the same ratio.

Indeed, it must be remembered that improved methods of manufacture often reduce the labor cost while wages are rising; on the other hand, the payment of higher wages and procuring higher grade help may have an equally potent effect

in lowering the labor cost per unit of product.¹ The shoe manufacturer is not necessarily justified in asserting that an increase in the rate of wages is good cause for an increase of price. Neither is the textile manufacturer justified in reducing wages on the ground that prices have been lowered. In either instance there may be some corresponding improvement in methods of production which will offset the increasing compensation to labor or the diminishing price. To be sure, an increase in wages may increase the labor cost per unit of product. The fact, however, does not necessarily follow.

Available statistics do not permit of any statement regarding the increase or the decrease in the labor cost per unit of product, except in the cases of anthracite coal and railroad transportation. The coming decade will doubtless see a considerable collection of such material. At present, the most that can fairly be done is to analyze the increase in wages, taking it for granted that this increase in wages is the cause of some corresponding increase in prices.

The available figures showing wage increases are meager in the last degree, and in most cases so unsatisfactory in form as to warrant the greatest care in their use. Nevertheless, it is possible to derive from these facts some general statements which give an idea of the tendency of wage rates.

2. The Wages of Agricultural Labor

The wages of agricultural labor have shown a marked tendency to increase during the past twenty

1 See Appendix F.

years. A recent bulletin on the wages of farm labor¹ contains a summary of the results derived in nineteen different Federal investigations extending from 1866 to 1909. For the United States as a whole, the wage rates of outdoor farm labor by the day in harvest work have increased from \$1.34 in 1866, to \$1.71 in 1909, an increase of approximately one-third. The same rate of increase is shown in the wages of outdoor labor with board, the daily pay increasing from \$1.04 to \$1.43. With the exception of the Western States, this increase in wages has been rather general. In the West, however, there has been no increase in the wages of farm labor since 1866. In fact, the wages of day labor in harvest work, without board, were \$2.51 in 1866, and \$2.51 in 1909.

In the meantime, there were large wage fluctuations. For example, in almost all instances of which the bulletin gives record, there was a sharp decline in wages centering around the years 1893, 1894, and 1895; so that a comparison between the monthly rate in hiring by the year from 1891 to 1909 shows a general increase of approximately thirty per cent. in the United States as a whole, of forty per cent. in the South Atlantic States, and of thirty-five per cent. in the Western States. A careful reading of the bulletin leads to the conclusion that the wages of farm labor vary greatly with the conditions of prosperity or adversity (the depressions of 1873 and 1893 both have had a marked effect in reducing farm labor wages); that between 1866 and 1909 there was a wage increase

¹ United States Department of Agriculture, Bureau of Statistics, Bulletin 99, Washington, Gov't Printing Office, 1912.

of approximately a third in the wages of farm labor, varying somewhat in different sections of the United States, and reaching the zero point in the Western States.

A comparison of the wages paid to farm labor during the last two decades shows that the increase of wages is equal to from thirty to fifty per cent., depending upon the state and the form of labor, and centering at about forty per cent. In so far, therefore, as labor cost is an item in fixing the price of farm products, the American farmer is compelled to pay about two-fifths more for labor now than he was forced to pay in 1890.

3. RAILROAD WAGES

The wage figures for industry are neither so complete nor so satisfactory as those for agriculture. They are perhaps most adequate in the railroad industry. A recent controversy between the Eastern railroads and the Brotherhood of Locomotive Engineers resulted in the compilation of a large amount of data by the Board of Arbitration, of which Charles R. Van Hise, of the University of Wisconsin, was chairman. From the figures compiled in this report, based wholly on the statistics of railways in the United States published by the Interstate Commerce Commission, it appears that there has been a steady increase in the average daily compensation of engineers, firemen, conductors, and other trainmen. Between the

¹ Report of the Board of Arbitration appointed in conformity with an agreement of the parties, published by the Secretary, November 2, 1912.

years 1897 and 1911 this increase was remarkably uniform, and amounted to approximately thirty per cent. An appeal to the reports of the Interstate Commerce Commission shows that this wage increase has occurred not only in the case of the trainmen, but of practically all other employees, with the exception of the common laborers. In some cases, as, for instance, of the machinists, it has been slightly greater. In other cases, as, for example, of the shop men, it has been slightly less. In general, however, it seems fair to say that the increase in railroad wages during the fifteen years between 1897 and 1912 was between a fifth and a third. When this statement is made it should be borne in mind that a very large percentage of the railroad employees (from one-fourth to one-fifth) are included in the groups of common labor, for which the wage increase has been very slight.

4. Wages in the Anthracite Coal Industry

Another special study recently completed of the wages in the hard coal industry shows that between 1902 and 1912 under a sliding scale agreement the miners received an increase in wage over the price agreed upon for 1902 of 4.2 per cent. This period is plainly too short to permit of any adequate deductions regarding the wages of hard coal miners. Nor do any of the government publications on the subject afford adequate statistics for comparison.

There seems to have been during the past two dec-

¹Increase in the Price of Anthracite Coal, prepared under the direction of the Commissioner of Labor, Washington, Government Print, 1913.

ades, in the manufacturing industries of the United States, a somewhat marked tendency toward an increase in wages. In Massachusetts, for example, where excellent statistics are compiled, it is possible to obtain statements of the average annual earnings of employees in the various industries between 1886 and Although there is a considerable diversity in the ratio of increase, it is fair to assert that annual earnings advanced between 1886 and 1910 from twenty to thirty per cent. In the boot and shoe industry, for example, the annual earnings for 1886 were \$503.48; for 1910, \$586.64; in the cotton industry the earnings for the respective years were \$307.66 and \$412.09; while in the manufacture of rubber and elastic goods the earnings increased from \$389.55 to \$544.62. The boot and shoe industry and the cotton goods industry, it must be borne in mind, are the two Massachusetts industries employing the largest numbers of persons.

The statistics of classified weekly earnings published in Massachusetts between 1903 and 1912 show a similar upward tendency, which is approximately the same as that shown in the classified weekly earnings of New Jersey, for which statistics are available between 1898 and 1912.

The statistics of average weekly earnings for New Jersey between 1897 and 1912 correspond rather closely with those for Massachusetts. In the woolen and worsted industry, for example, the increase in earnings is equivalent to twenty-five per cent.; in the silk industry it is practically nil; in the manufacture of machinery it is equivalent to ten per cent.; while for

all of the industries of New Jersey combined it amounts to approximately twenty-five per cent.

Manufacturing industries, wherever statistics are available, show a fairly uniform ratio of advance in wages during the past twenty years. There are a few industries in which the rate has advanced little, if at all; there are a handful of industries in which it has decreased, but in most industries it shows an increase of between a fifth and a third. From twenty to thirty-five per cent. represents, largely, the ratio of wage advances in manufacturing between 1890 and 1911.

A report recently issued by a Senate Committee deals at some length with the wages in the building trades between 1902 and 1910. These wage figures, derived primarily from the employers in the largest cities of the country, show an increase in most of the building trades not exceeding twenty-five per cent., although in some cases, as, for instance, the plumbers and steam fitters, the rate of increase is thirty-five per cent. In a few rare instances among some of the metal workers it rises to sixty per cent. Although this statistical material is not in any sense authentic, it is worthy of notice, in view of the fact that it corresponds accurately with similar statistics compiled by the United States Bureau of Labor.

5. A SUMMARY OF WAGE INCREASE

The part which wage increases are playing in forcing up the cost of living seems rather clear so far as the

¹ Report of the Select Committee on Wages and Prices of Commodities, Senate Rep. 912, 61st Congress, 2d Session, Washington, Government Print, 1910.

wage rates are concerned. In agriculture, the past twenty years has seen an increase of approximately a third in the wage rates of labor; in railroading wage rates have increased perhaps a quarter; while in manufacturing industries the adequate facts which come to hand indicate that the increase in wages has been from a quarter to a fifth. Since these are general statements, they of course involve many exceptions. Nevertheless, a frank survey of the figures thus far collected suggests that the increase in wages is considerably less than the increase in the prices of many food products.

A consideration of the wage-price changes during the past twenty years bears out the suggestion that "the advance of wages set in long after the increase of prices" and that "the wage advance appeared in the wake of the price increase as a consequence or offset, rather than as a primary cause. . . The increase of wages . . . has come about as effect, result or consequence of the upward movement of prices." Although the producer may find that in 1914 his labor costs are higher than they were in 1895, the fact remains that the increase in labor costs has followed, rather than preceded, the rise in living costs. It is primarily a result, not a cause, of the increasing cost of living.

¹This statement applies to labor as an element in production costs, rather than to the wages of laborers.

² Massachusetts Commission on the Cost of Living, Op. Cit., p. 472.

XVI

FACING THE ISSUE

1. THE COMPLEXITY OF FORCES

THERE are two distinct phases of the cost of living problem which must be separately considered and dealt with. On the one hand, the standard of living is increasing. On the other hand, prices are increasing. Each issue presents manifold complexities.

The rising standard of life is a part of the nineteenth century transformation of Western civilization from the life of the agricultural village to the life of the industrial city. What the final result of this change may be, no man can say. Thus far there has followed in its wake a reorganization in family life, and in the mode of living which has placed families, as never before, at the mercy of prices and price changes.

The well-to-do have pushed their standard of living forward with urgent rapidity. Competition between neighbors has elevated the number of goods which makes up a "good living" farther and farther beyond the reach of the low income man. Still, the well-to-do form but a small proportion of the total population. The great mass of people are agitated little or not at all over the luxuries of life. Their prime concern is with life's necessities, and with a few of its comforts.

The increase in prices has been rather general and very irregular. The prices of some commodities have risen with great rapidity. In other cases the price advance has been slow. In still other instances there have been price decreases. The general movement of prices is, however, undoubtedly upward.

2. The Factors in Rising Prices

Price increases are apparently due to a number of significant economic forces. The most fundamental of these, perhaps, and certainly the most far-reaching, is the increase in land values, involving, as it does, an increase in the value of all raw materials derived directly or indirectly from the land. All of the available facts relating to the value of city land, of timber land, and of agricultural land, lead to a uniform conclusion, namely, that during the last two decades land values in the United States have increased at a rate that is beyond the grasp of everything except statistical computations. Had the actual cost of living during the past ten years increased as rapidly as the value of agricultural land and timber land, almost everything which the consumer now demands would sell for two or three times its present price.

The failure in the supply of certain kinds of food, notably of meat products, is only less significant than the increase in land values. The population of the United States is increasing rapidly both by birth and by immigration. Meat products, which constitute the largest single element in the diet of the ordinary family, show an alarming tendency toward price increase. The explanation is simple. The animals from which

these products are derived are decreasing or else increasing in number less rapidly than the population. The inevitable result is increased price.

During the past twenty years there has been a general increase in the wages paid to labor. To be sure, some wages have actually decreased, but in the majority of industries an increase is reported, although this increase varies considerably. In a large proportion of the instances this wage increase is not so great as the increase in the prices which the laborer is forced to pay for his food supply. Still any increase in wages must be considered as an element in determining the price of that product which the laborer assists in producing. On the other hand, the fact should always be borne in mind that wage increases dragged considerably behind the increase in prices, and came finally as a consequence of, rather than a cause of, price advance.

Many raw materials have actually decreased in price. Taking all raw products for which price figures are available, the number showing decreases in price is only a small fraction of the number showing increases. However, in a large proportion of the cases, these increases between 1890 and 1911 are less than twenty-five per cent. The raw materials showing the sharpest price advances are agricultural products, timber products, and some minerals.

The increase in the gold supply has tended automatically to increase prices. So long as one commodity is used as a value standard, and exchanged for all other commodities, an increase in the amount of that standard commodity necessarily decreases its value when

it is compared with the other commodities. That the increasing gold supply is an element in price increase goes almost without saying. That it is the only element, or that it is even a determining element, the available facts do not show.

The world has attempted to personalize the blame for the rising cost of living. The housewife looks to her grocer as the cause of high living costs; the grocer points to the middleman; the middleman indicates the producer,—the manufacturer, miner, or farmer; the producer in turn points to the increase of land values, the increase in the cost of labor, the increase in the supply of gold, and the diminishing supply of certain raw products from which his goods are made. A study of the fact shows clearly that the blame for increasing prices cannot be laid to the charge of any one individual or group of individuals. The rising cost of living is a modern economic phenomenon.

This is not of course the whole story. In many cases the producer has taken advantage of real or artificial decrease in supply to exact monopoly prices. In many cases he has over-capitalized the values of land and of raw materials, and has then earned dividends on his over-capitalization. Then, too, there are many industries in which the invention of improved machinery has so reduced the cost of production as to offset the increase in rent and wages. On the whole, it is probably true that most producers now face higher production costs than at any period since 1896. The extent of the increase varies; the fact remains almost universal.

3. MAY THE RISE IN THE COST OF LIVING BE CHECKED?

May the rise in the cost of living be checked? Is it possible by individual or coöperative action to stay the speed of rising standards or rising prices?

There is no real need to check rising standards, provided that they include the many, as well as the few; provided there is no encroachment upon the stored up wealth of society and provided the increase does not involve a philosophy which puts the ownership of economic goods before all other things in life. The individual must find salvation from an exacting standard of achievement in a reconstructed philosophy that will make him the master, and not the slave of the things which he possesses.

The real interest centers around the prices of commodities. Price increases, particularly those great increases which have recently occurred in the prices of the necessaries of life, modify the economic position of the throng of people who live on small incomes. There are two possibilities in price modification. The prices can be reduced, or an increased amount of service may be rendered at the same price. Through either of these means, the low income portion of the population may hope to hold its own against the tide of rising living costs. There are some means by virtue of which price increases may be checked. There are other means by which price increases may be counteracted or offset. Both subjects must be carefully analyzed before the means of price reduction are mastered and applied.

4. CIVILIZATION A CONQUEST OF DIFFICULTIES

The cost of living problem presents some ugly aspects. There are in it some difficulties which, on their face, appear insurmountable. Nevertheless, the issue must be met and solved. It is one of the vital questions involved in a changing civilization. Civilization is built upon the conquest of difficulties. Necessity has taken a proverbial place as the mother of invention. What men have been forced to do, they have accomplished in a long process of adjustment between man and his environment.

Civilization is now in the throes of a transformation as profound as any that has occurred in preceding epochs. Like all changes, this one carries in its train a multiplicity of complications against which society must contend.

The Western world will solve the problem of the increasing cost of living, or else the increasing cost of living will wreck the Western world. No society can endure in which the cost of the necessaries of life is rising faster than the incomes with which the great majority of the population secure those necessaries. Such a process, long enough continued, leads inevitably to individual and social bankruptcy.

5. Framing a Solution

There are certain principles that must guide whatever action is taken by society in its effort to meet the increasing cost of living. In the first place, wherever such a thing is possible, the work should be left to local authority. It is unnecessary, for instance, that retail markets be established by state agency. State encouragement there should be, but the actual work of administrating municipal markets must be undertaken by the municipalities themselves. On the other hand, in all cases where the point at issue is of more than local importance, it is the sheerest folly for local authorities to attempt to cope with the problem. Such an issue as the taxation of farm land values, for instance, must be met by the state. Even were it legally possible for the local authorities to cope with such situations, practically they must of necessity fail to do so because of the conflict of local interests. No one should hesitate about turning to larger governmental authority in cases where the smaller has failed of its purpose.

Nor is it desirable that the country should rest peacefully in the hope that one single act of the national government will solve the problem of the increasing cost of living. In many quarters there is a strong tendency to believe that a chief executive at Washington will by a single stroke of genius settle the cost of living issue for good. Reduce the tariff, cry these line of-least-resistance-devotees, curb the trusts, reform the currency, and the work is done. No remedy could be easier; none more futile. The problem is too many-sided to be solved in any such offhand manner.

The cost of living problem, nevertheless, presses for solution. Every element in society feels its impact. Day by day the facts concerning it are being brought to light. A stage has been reached where some form of action is necessary,—a stage which demands con-

structive scientific thought. If the issues are to be successfully met the facts must be squarely faced; each city and state, and where necessary, the national government, must adopt a program for reducing living costs.

XVII

THE SIMPLE LIFE

1. An Individual Remedy for the High Cost of Living

THE complexities of the cost of living issue do not prevent the individual from playing a large part in its reduction. The individual cannot control prices. He may, however, play a conspicuous part in the drama of living cost reduction by simplifying his life, curtailing his wants, serving himself wherever possible, and spending the income which he receives more efficiently. This is not the remedy for the increasing cost of living. It is a remedy, though, and one that may be applied with peculiar advantage by the well-to-do.

The well-to-do have been led by a will-o'-the-wisp called "the possession of things." "Give us things," these eager ones have cried, "and we shall be happy ever after."

Some of the well-to-do have entered the competition and stayed in it. They are still struggling madly for the possession of things—for the possession of more things than their neighbors. Others have dropped out beaten, embittered by their defeat, and cursing the hard fate which has compelled them to leave the race. Still others are in the lead. They have more than any

of their neighbors. They have all that wants can dictate, or that money can purchase. They have surrounded themselves with the luxury of kings. Do they enjoy it? Certainly not. The very taste of it is gall and wormwood to them. Unless they have climbed out over the foot-hills of a belief in salvation through the possession of things, their mouths droop; their digestion fails; their lives are barren; they have enough. For such the simple life is fraught with uncounted possibilities.

2. CAN MEN GET BACK TO NATURE?

Sick of the pursuit after riches and of the vapid living of the well-to-do, Rousseau urged men to go back to nature. He pictured in glowing language the life of the savage. Rousseau assumed that the savage was virtuous, noble and happy. It was on the basis of this assumption that he urged Frenchmen to go back to nature. Like many another brilliant writer, Rousseau built his dreams on a misstatement of facts.

The studies that have been made since Rousseau's time prove conclusively that the savage is not a happy child of nature, his life a glad song of thanksgiving and praise to her. Rather it is fraught with uncertainties and terrors. The savage fears the lightning, the comet, the storm. He sees in all of the expressions of nature's power an effort on the part of some god to strike him down. He shudders and hides himself from that very Mother Nature which civilization utilizes to such manifold advantage, and in which poet, philosopher, and scientist find such material for study and thought.

Even though it were possible for mankind to throw aside the knowledge which civilization has accumulated, even though it were considered desirable to go back to nature's state, the thing is unthinkable. Mankind goes in only one direction,—forward. He goes forward because all that the past can hold is less to his advantage than the good which the present and the future afford.

3. Competition and Barbarism

Going back to nature is equivalent to going back to competition. Who shall cry, after contemplating the fearful struggle of nature,—"Let us go back"?

Living in a state of nature, man competes on equal terms with the animals. The lion is his master. The tiger and wild boar tear him to pieces. He flees from the bear and from the wolves that cry their pack yell. Natural man is at the mercy of every animal that is larger and stronger than he. The invention of weapons and of gunpowder gives man a monopoly advantage over the brute creation.

Living in a state of nature, man was continually competing with his fellows. If a choice kill fell to his luck, he fought for it. If a neighboring horde or tribe saw in the land which he held a chance to better its lot, there was a battle, or a series of battles, until one had eliminated the other. An eye was taken for an eye, a tooth for a tooth. The even-handed, competitive justice of nature knows no mercy. The logic of her decrees is unanswerable and frightful.

Civilization has mitigated nature's justice. Social justice presupposes a touch of social judgment and

human reason. An eye is no longer exacted for an eye. Personal conflict is not the only means of determining personal worth. Civilization has mingled with nature's justice a show of human reason that sublimates it and renders it endurable.

Living in a state of nature man would compete with nature. If there was a famine, he would starve. If there was a flood or a forest fire he would die. The savage lies in the lap of his iron goddess, and accepts her decrees as they are promulgated, almost without a protest. Civilization does not fear nature's forces. They provide the motive power by which the car of progress is driven.

No hope lies in getting back to nature. There are no possibilities in the restoration of competition. The welfare of the future depends upon man's ability to continue his subjugation of nature. Through coöperation lies the true path of progress.

4. REDUCING THE DENOMINATOR

The numerator of a man's life is his income. The denominator is his wants. Men may not go back to nature, nevertheless they may simplify life. Where the numerator is greater than the denominator, when all wants are supplied, there is no longer any unhappiness due to the lack of things. Where the wants are more than the income, there unhappiness exists.

There are two possibilities where the income is less than the wants. The income may be increased, or the wants may be diminished.

The well-to-do have sought salvation through the increase in the numerator. By fair means and foul

they have added to income. How little have they understood that wants are ineradicable through the increase of income! As soon as one want is satisfied two appear in its stead. The well-to-do struggle for satisfaction has been a struggle to increase income. Its only hope lies in a reduction of wants. The incomeover-wants fraction differs from all the other fractions in this respect, that no matter how fast the numerator is increased, up to a certain point, the denominator increases quite as fast, or faster. The only hope of converting it into a whole number lies for most men in the reduction of the denominator.

The denominator of the livelihood problem can be reduced. Wants can be restricted when men learn that the real satisfactions of life do not come through the possession of goods at all.

The wants of men are the result of two things. There are first the wants for the necessaries of life. These wants are natural. Man possesses them in common with all other animals. There are in the second place wants which are the product of civilization and its teachings. Patent leather on shoes, lace on dresses, neckties, soft draperies, are the result of education, not of inherent qualities. The natural wants must be satisfied. The acquired wants may be, or may not be satisfied, as a man insists, or does not insist, on keeping up with his neighbors.

When the time comes that men believe in themselves rather than in the things that they possess, a long stride will have been taken toward the reduction of the denominator of wants. So long as men believe in salvation through the possession of goods, so long will they continue to suffer from that misery which failure to possess some coveted object can alone produce.

5. HAPPINESS, SATIETY, AND SATISFACTION

The salvation of those among the well-to-do who put their trust in the possession of things will be wrought when they understand the difference between happiness, satiety, and satisfaction. Happiness is an ethereal or blissful state of contentment, or even of oblivion of material conditions. Satiety is the feeling of overmuchness that follows surfeit. Satisfaction is the feeling of completeness which is the result of work well done.

Men postulate happiness as the goal of endeavor. They hope to forget. They look forward to a millennium in which mankind shall be free from pain, shame, and sin.

Rousseau's philosophy aimed at happiness. Rousseau himself revolted against the excesses and the crass material life of the well-to-do. He was horrified at the privatious which existed among those whose work supported the well-to-do. The whole fabric of civilization seemed to him a tissue of lies and shame. Against it he uttered his protest,—"Back to nature." He hoped the return to nature would be a return to simplicity, virtue, and peace. He did not understand that nature, red in tooth and claw, was forever at war. He did not know that fear and lust and hate stalked unhindered through every primitive society.

Among the well-to-do in American society there is a voice raised here and there, crying, "Back to nature."

Men leave their businesses and take up farms. They go from the city to the mountains; yet escape is almost impossible. No sooner is a choice spot discovered than some enterprising neighbor erects a summer hotel, inserts an advertisement in the daily papers, and sets up a mountain city. The great majority of the well-to-do seek their salvation in things. They pile up income, and they pile up goods as high as the art of man will reach. When they have finished, they turn away, discouraged. After all, it is but dust and ashes in their hands. They have encountered the monster Satiety, which lies in wait for every one who seeks salvation in the possession of many things.

There are those who seek their salvation in effort. Day by day they strive to achieve that upon which they have set their hearts. Day by day a little is added to the completed whole, until at length their product stands,—a new formula, an invention, a business, a cathedral, a picture. The man bows his head, heaves a great sigh of satisfaction and goes about his further business. He has reaped the reward, even though it be but a partial one, of his endeavors.

Salvation lies in doing, which is another term for growing or unfolding. Men derive the greatest beatitudes from a life of achievement. The blessings of the world are showered upon the head of him who does the world's work. It is not yet time to sit peacefully down and wish for the happiness of the millennium. The piling up of things yields no satisfaction. There is work to be done. Therein lies man's satisfaction and his glory.

6. As a Man Thinketh

The simple life lies in the pursuit of those things which are worth pursuing. The numerator of income cannot be raised permanently for most men. The effort directed toward raising it is futility itself. The denominator may be reduced by most men, if they will turn their eyes forever away from the hope of happiness in the possession of things, and contemplate the possibilities of satisfaction in service well rendered. In the last analysis, there lies no greater satisfaction, and no nearer hope for man's salvation.

XVIII

BACK TO THE LAND

1. EACH MAN HIS OWN SAVIOUR

An individual can always fight the rising cost of living by seeking the satisfactions of life within himself. The work of the world is to be done. Its battles are to be fought. Man alone can gain these triumphs, and only through consistent effort.

Each person may play a part in reducing the cost of living by decreasing the number of his wants, and by seeking for satisfaction rather than for happiness. He may go one step farther and adjust the proportions of his life until he performs many of life's services for himself. Such a doctrine obviously applies to the well-to-do. It is idle to turn to the needy with the behest that they reduce their wants or perform more self-service. Nevertheless, it remains true that even among the needy there are opportunities for self-service. No one phrase so well expresses the demand for self-service as the phrase "back to the land."

2. THE MOVEMENT TO THE LAND

The movement to the land is, in its essence, a protest against the intricacies and complex relationships of a society in which men have become so interdependent

that they feel the yolk of enforced coöperation pressing upon them.

The city dweller is confronted by fearful odds. He is galled by the restraints of a position which scientific management has reduced to an appalling fineness of specialized certainty. He revolts against rising standards which he is compelled to follow, and rising prices which he pays whenever he buys. The confining restraint of city life overwhelms his spirit, giving him, as it does, the sense of restraint and lack of vision. Against these coercive forces that hedge about the freedom of the city man, he cries out in vigorous protest. By way of ameliorating his lot, he turns an eager gaze toward the country.

"The air is good," says the city man. "The life is in the open. Then, best of all, the farmer is no man's man. He is free!"

The city man is wrong, of course. The farmer is tied down by his round of daily chores, and restrained in all of his dealings by high freight rates, and the impossibility of securing a reliable labor supply. In a large sense, however, the city man is right. The farmer can, if he will, step out of the machine.

A well-run farm yields a rather sure and a fairly good living. There is always food, at least, and it is a poor farmer who cannot produce enough to buy the other necessaries of life. As for the comforts and luxuries they are found everywhere on the prosperous farms, and as each man hopes in time to become a prosperous farmer, their possibilities are always before him.

The agricultural colleges have helped in the move-

ment back to the land. They have proved beyond cavil that a man trained in the science of agriculture is as valuable, to himself and to society, as a man trained in the science of engineering, or of medicine. Perhaps he may be more valuable for the time being, because of the woeful dearth of scientific farmers. The agricultural college has thrown the cloak of culture about the most ancient of man's occupations, lending to it an air of respectability that makes it a pursuit possible and desirable even from a social standpoint.

The developments of modern science along other lines have led people back to the land. Telephones, phonographs, good magazines, home conveniences, and the like, have placed the comforts of the city dweller within the reach of the well-to-do farmer.

When all has been said, two things stand out prominently in rural life. Service is hard to secure. When it is found, it is likely to be independent and democratic. Both considerations relieve farm life of the charge of increasing the cost of living by an increase in the amount of service demanded. The farm man and the farm woman face the ever-recurring necessity of being well served by serving themselves.

Perhaps the chief cause of satisfaction that men and women find in rural life is freedom from servility and independence of service. The city housekeeper is tied down by her servants. The rural housekeeper does her own work, and is free of the trying pressure which service would put upon her. Back to the land means back to independence, both from the intense machine pace of the city and from the hopeless burden of personal service with which the city man is loaded down.

3. TRUCK-PATCH OR AUTOMOBILE?

The man who remains in the city faces a very real opportunity to reduce living costs by relying on his own efforts for service, and by taking every opportunity to serve himself. The man in the city is not necessarily dependent on all of the multitudinous forms of service which confront him. He may assert his independence of them to a limited degree.

A man living in a fine suburb had a truck-patch in which he took particular pride. His patch was not large—it covered only the rear end of a suburban lot; but it was well cultivated and carefully tended. Each day on his return from work, and each Saturday afternoon, and sometimes on Sunday, the suburbanite worked in his garden. The exercise guaranteed him health, and the intelligent direction of it provided the family with an abundance of fresh vegetables in season.

One day the tempter approached the suburbanite in the form of a friend who had an automobile agency. "You could put your garage back there," the friend explained, with a motion toward the back of the lot.

"But my garden!" the suburbanite protested.

"Of course," insisted the salesman, "of course you would have room for both. A driveway and a small garage are not going to take all of that space."

His argument was good. His offer was unusual, and the suburbanite decided to accept. Grudgingly he gave up one small corner of his garden; the garage was erected, and the auto installed.

While the good suburbanite had felt some hesitancy about buying the automobile, his wife and daughters

had no scruples whatever. Indeed, they had played no inconsiderable part in the call of the friendly neighbor who had the agency. Once the machine was installed they began making plans. Their neighbors had owned machines for a long time, and they had done many lovely things with them. At last the time had come when this family might do likewise. Therefore they arranged the time. When they went out to dinner, father took them in the auto, and on several occasions they even planned dinners in order to go out thus proudly. On Saturday afternoon there were teas, golf matches at the club, trips to town, and little spins through the country with friends of the family. They stayed at home when it rained. Otherwise they were abroad with father and the auto.

That spring father made a garden. He found, however, to his surprise, that he was unable to keep the patch cultivated. It was smaller than it had been the year before, too. Nevertheless, he was always out with the auto on clear days, and when it rained he could not work in the garden anyway, so he overhauled the machine.

That is not the end of the story. If space permitted, it would be possible to tell how the garden was a failure that year, and how the following season father, who had suddenly found gardening a very discouraging and unprofitable business, decided not to plant a garden. Then, too, the prices of vegetables rose, and the cost of repairs on the car that second season were high. Mother and the girls smiled gayly at the neighbors as they started out on Saturday afternoon for a little spin; but father did not smile. He was thinking

of his check-book, and remembering, a little ruefully, what splendid physical trim he was in while he dug in the garden.

The tale has no moral. Sometimes it is an anto; sometimes it is a larger house, or a more expensive environment. The general proposition remains the same, however. The man who chooses the truck-patch reduces the cost of living for his family, while the man who chooses the auto increases it.

4. GETTING THE CITY MAN BACK

The city man must be brought back to the land. Even a truck-patch twelve by twenty feet will yield more than no truck-patch at all. Even the small cozy bungalow of nine rooms will prove, in the long run, more satisfying than the mansion of thirty rooms. The cost of living depends in a very considerable measure on the extent to which people are willing and able to serve themselves. If men will get back to self-service and dispense with some of the numerous forms of service which are rendered them in the city, they will go far toward reducing the high cost of living.

Will the city woman go back to the land? Will the well-to-do, smartly tailored, finely educated, socially connected city woman at last realize the importance of serving herself?

The well-to-do city woman has servants now. She is never seen demeaning herself by washing the windows, for example. A servant does that. What has she to say to washing and ironing? Washing and ironing? Never! Servants do that. Does she set her own table, cook her own food, make her own hats and

gowns, clean and keep in order her own house? Yes, she does such of those things as do not show to any considerable degree. Otherwise the servants do it. The well-to-do city woman really depends upon her servants a great deal. Then, too, the telephone helps her with the grocery, the butcher shop, and the drug store; the bread boy, the milk man, and the ice man call every day; and the trains and trolleys are so convenient! Surrounded by service, which is paid for usually by the man of the family, the well-to-do city woman finds it quite unnecessary to exert herself severely.

The well-to-do city woman keeps her youth. The lines do not sink into her face. The burdens of life do not bow her shoulders, or sour her temper. When she finds the world getting too strong for her, she goes to the matinée.

"Indeed!" she cries testily, "but I am always busy."

Yes, busy and always occupied. So is the man who tosses a ball against the side wall and catches it again, and again, and again. The well-to-do city woman is occupied with clubs, lectures, shopping, calling, card playing, dancing, and the like. Some of this work is vitally important to the future of society,—the work for social improvement, as an example. The city woman is occupied, but the vast majority of her hours are spent in doing things which bring pleasure to her, at the expense of service from some other.

My lady is proud of her youthful lips and her delicately rounded cheeks. Set them beside the lips and cheeks of this other woman here. She draws back in disgust. Her lips are straight and firm; her cheeks are seamed; but remember that she has borne many children, and worked arduously for them, by day and by night. The lines on her face are the lines of service. My lady's face is fair; hers bears the stamp of the iron cross. She has laid her youth and beauty aside to serve those who were dependent upon her.

My lady, come back to the land. Come back to service. It will line your brow and ridge your cheek, but it will leave a satisfaction in your soul which you can never possess while you lie back in the lap of comfort and luxury, provided by the efforts of others.

5. GETTING THE CHILDREN BACK

The children of the well-to-do may come back to the land, and thereby reduce the cost of living. In many a home they are being taught to look for service from others, and to serve themselves not at all.

There are tasks, even in the city flat and in the city house, which children can do. These tasks are now done by servants, or by the adult members of the family. Turn them over to the children. Teach them service. Not one child should escape. Each should feel pressing upon his life, or her life, the responsibility for some part of the work of the home. The part may be a very simple one. The work will, of course, be fitted to the child's age and ability to work. But it will make the child feel that he belongs to the family, and that the family is, in a very real sense, dependent upon his assistance.

There is one condition, however, that may not be ignored in this connection. Where servants are relied

upon to do the work, the children cannot expect to take a share of the burden incident to serving the family. Servants and servility have become so inseparable that servants and masters' children will hardly work together.

The service which a child may perform is comparatively slight. The principle of service and the habit of service which the service of the child instills, is of incalculable value. Bring the children back to the land. Teach them how vitally important it is that every member of society should serve, to the extent of his powers, in the advancement of his own interests and the interests of the group to which he belongs.

6. GETTING THE FARMER BACK

There is a pressing need for the farmer to come back to the land. He is leaving it—renting his farm and moving into the village, where he expects to pass the remainder of his days in ease and comfort. His children are leaving it—going into the city, and there struggling madly in that surging torrent of humanity which rushes onward, aiming, for the most part, at a goal called success. Even while he stays on the farm, the farmer depends less and less on his own efforts, and more and more on the sale of a specialized crop, in return for which he will buy what he needs. Mister Farmer, you are needed on the land!

There is a belief abroad—a belief that has taken fast hold of thousands—that the time for a man to retire is the time when he can get enough to live on without working. Could any fallacy be a greater menace to the future of society? If a man has enough,

he retires at sixty, at forty. Suppose his father has left him enough, shall he retire when he comes of age and falls into his income? Is it the hope and purpose of American society to develop a leisure class? Such a luxury adds immensely to the cost of living, because when there is a leisure class, it is of necessity supported by the workers. The time for a man to retire is the time when he can no longer serve. Then, and no sooner, he should lay aside his harness.

Will the farmer's children come back to the land? Are the agricultural courses offered in the schools, and the increasing comforts of rural living sufficiently powerful to bring them back? The city is full of gay sights and loud sounds. There is laughter there and jollity. The newcomer and the superficial observer do not see the bitterness and the hate. The city blazes with light and glitters with opportunity. Will the boy and the girl withstand its lure, and instead be content with the simple life of the farm?

A great band of men and women is striving to persuade country boys and girls of the value of the simpler life. If they will heed and understand, they may do much to reduce the high cost of living, both for themselves and for the rest of mankind.

The farms need improvement. There are countless possibilities in intensive cultivation. Each farmhouse would be more livable if it had beside it an excellent truck garden. There is such a thing as farm specialization so high that the costs of the product far outweigh the advantages to specialization. If the farmer, well trained in his craft, will come back to the land, he can perform a service of the greatest social value in

reducing the living costs. The motto of business is "Efficiency in All Things." He applies to agriculture the formulas that have proved successful in the development of manufacturing, and he uses his land.

7. SELF-SERVED, SELF-SAVED

There is a salvation in getting back to the land. A small part of this salvation lies in a reduction in the cost of living. A great part of it lies in self-service.

Man may not live by bread alone. The manifold nature which is his demands use. There is a law of nature, inevitable, everlasting,—"The soul that idleth it shall surely die." The penalty of disuse is decay. There is no compromise with this behest.

Back to the land, back to service, means back to a complete life. The man who is self-served drinks more deeply from the springs of life than he who is served by others. The road through service leads to the heights of life.

XIX

SOCIAL EDUCATION

1. The Direction of Horse Sense

THE reduction of the cost of living through a resort to the simple life and through a movement toward self-service, will be most effective among the well-to-do. Some readjustments are necessary among people of low income. On the whole, however, such people now live lives of comparative simplicity, and depend, in large measure, on themselves for such service as they require. The problem of simplifying life and of reëstablishing personal service is a problem of the well-to-do; the outcome of a well-directed social education should be a reduction of living costs for all classes.

Most tasks may be performed in an easy way, or in an infinite number of more difficult ways. The faculty of finding the easiest way is often described as ingenuity or horse sense.

Ingenuity, like any other human attribute, may be cultivated through additions of knowledge or of experience. Experience is gained in only one way,—personally. Knowledge, which is an accumulation of the experiences of the past, may be imparted to people through education. Social education consists in imparting to individuals the experience which has been

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gained in the doing of certain things. One man's opportunities of gaining experiences are so limited that they may be enriched, to almost an infinite degree, by adding to them the experiences which other individuals have had in the attempts to attain similar results.

Social education will have its first effects upon the purchasers of the community. At present, the power of directing expenditure for consumption goods rests largely with women. Producers are in business to make goods for buyers. It is the producers' business to find out what buyers want, and then to supply that want. The buyer thus becomes the center of interest. As the buyers insist, the producers yield. In what ways may the buyers be educated to reduce living costs?

2. Where to Buy and How

The ordinary family spends from three-fourths to four-fifths of all the income that it receives for food, clothing, fuel and light, recreation, health and sundry minor items. The woman of the house ordinarily takes charge of this spending. Therefore it should be a part of the duty of social education to train the women of the community to wise buying. There are two ways

¹ Some idea of the total significance of the buying power of women in the community may be gained by a rough estimate. The income of ordinary families in industrial sections ranges from \$400 to \$1100 with the mode (maximum number) at \$600 or \$700. The latest census returns show twenty million families in the United States. Since only about one-third of the population is engaged in agriculture, there should be perhaps twelve or fourteen million families depending largely upon income from some industry other than agriculture. Even if the minimum is placed at ten million

in which this can be done,—First, through the school; and second, through well-directed publicity channels maintained by the city and the state.

Every school should maintain a course in domestic science, which teaches the girls, among other things, how to buy wisely. Such knowledge should extend through the entire list of things which the woman is called upon to buy in the course of her domestic life,—food, kitchen utensils, furnishings and furniture, and clothing.

There are a number of American public schools in which the buying work is being carefully planned and executed. In one school where particular attention is paid to buying, certain of the girls who are taking the more advanced work in cooking are called upon to serve a daily luncheon to the faculty. The members of the faculty provide the money, and each day three girls are assigned to the task of planning the meal, buying and preparing the food. In this lesson, the planning and buying count even more than the cooking. In another school, girls and boys alike are asked to serve dinners on a specified sum. A part of their arithmetic lesson consists in figuring out food costs. Similar work is done in the case of clothing. In one sewing department, where girls make their own patterns as well as their own dresses, each girl is required to keep a cost account, in which appears a record of all materials used and of all time spent. By

(a very low figure) these families, at \$600 per year, would spend annually six billions of dollars. Such an approximation is in no sense accurate. It merely throws the magnitude of the issue into the foreground.

a glance at this cost sheet the girl can tell exactly what outlay her garment has involved.

There is a feeling in some communities that domestic science has its place in the high schools. No educational proposition could be more fallacious. The fact of the matter is that domestic science has a place in the knowledge of every girl who goes through an American school.

There is a great difference between deciding in what year of the school domestic science shall go, and in deciding that every girl shall have domestic science training. More than nine-tenths of the girls will practice domestic science. Therefore the training is important for them. About three-fourths of the girls never go beyond the eighth grade, therefore the training must be given to them before that time. In factory neighborhoods and in districts where the poorer families live, very few girls finish the grammar school and almost none begin high school. What is more absurd than to go into such a community with the proposition that domestic science belongs in the high school? Domestic science belongs in the grade where it will reach the girl before she leaves school. Whether she leaves in the third grade, or the tenth, the fact still holds.

The city and state may both assist in spreading knowledge about buying by maintaining a market bureau. From this bureau, information may be distributed regarding wholesale market prices, and retail prices in various parts of the city. The chain store, through its newspaper advertisements, does much to stabilize prices. This same price stabilizing influence

could be broadened if it were made official. An official daily bulletin of prices, issued broadcast, and published in the papers, would be a boon to buyers.

The buyer must look to three things. First, the nature of the commodity; second, the quality; and third, the quantity. Each element is a factor in efficient buying.

The nature of the commodity is the prime essential in buying. If muslin will serve the purpose as well, or better, why buy linen? If the table is already supplied with an ample amount of protein, why buy other proteids at a high price when starches, at a tithe of the cost, would serve as a balance to the diet? Effective buying presupposes some knowledge of the nature of goods that will fill a particular need.

Equal importance attaches to the quality of the material. The well-to-do have an expensive habit of entering a store and vociferating,—"Your best." Because of that fact "our best" is always hung two pegs higher in the scale of price than it would be if the well-to-do were less forward about it. The woman of moderate means can seldom afford "our best." She must content herself with some less expensive grade than the premier. The ability to pick the grade which will yield a maximum of return is the earmark of an experienced and a judicious buyer.

Less emphasis might be placed on the quantity of goods bought if all fraud among retail dealers could be eliminated. Investigations among the dealers of various cities have shown an astonishing proportion of false weights, false measures, and other devices for fleecing customers by selling them short quantity.

These are three general rules that the buyer should seek to enforce in the interest of readjusted living costs. Buyers should insist that goods be produced under sanitary conditions; that the men and women who produced them have fair conditions of labor; and if possible, they should see the goods which they buy. The latter point, applying primarily to 'phone orders, is significant for the well-to-do, and negligible for those of low income.

The consumer's power to dictate the conditions under which production takes place, including the conditions of labor and of sanitation, has been more generally discussed than realized. The consumer is the objective point in the productive processes. Production is carried on for the purpose of selling goods to consumers. An organized group of consumers can, therefore, dictate terms to producers. A beginning in the organization of consumers may be found in the Consumers' Leagues. It remains for the women on low income to organize a consumer's union that shall be in a position to make way against the power of organized producers.

3. Domestic Science

There is another side of the problem, equal in importance to the purchasing side. Things that are bought are bought to be used. Therefore, wise use takes its logical place, side by side with efficient buying.

Domestic science is a term relating to those home activities which are involved in the utilization of goods and services in the interest of the members of the family and the home. Since the family and the home are basic social units in Western civilization, the administration of their affairs ranks as a task of immense significance.

The burden of directing home activities falls largely upon parents. The burden of insuring well-directed homes in the next generation falls no less pertinently upon the school. Home teaching and school teaching combined afford the sum total of the instruction which any girl may hope to receive in the art of home management.

The old-fashioned home,—a homestead where industries and crafts were carried on by the housewife, -taught domestic science in all of its traditional branches, just as the general farm taught general farming in all of its tradition branches. Such homes are being rapidly replaced by the city house, apartment or tenement. The industries and crafts of the old-fashioned home are now carried on in factories. Many of the home activities which were formerly a training ground in domestic science have left the home, probably forever. At the same time, the search-light of experimental science has been turned upon home problems. Chemistry and dietetics have made their contributions. Sanitary science has insured additional safeguards to health. Mechanical appliances and utensils have greatly decreased the amount of back-breaking labor incident to home work. The movement of progress has been toward a coöperative execution of cooperative tasks, leaving to the home only individualistic work.

The home still has many functions, however. Where

ever there are meals prepared, or children tended, or households tidied and cleaned, or household goods purchased, or food supplies laid in, there the girl may be taught in the home. Home responsibility has not lessened with the disappearance of home occupations. It has rather increased because the mother has more time free from home responsibilities to devote to her daughter's home education. There remains one notable barrier to home education in domestic science,—the ignorance of mothers.

Mothers cannot teach what they themselves do not know. The knowledge of mothers is limited by two sets of forces. On the one hand, their mothers, ignorant in turn, did not give them adequate instruction. On the other hand, the new discoveries of science are not often brought to the attention of mothers, particularly of busy mothers. The logical avenue of approach to the mothers of the next generation seems to be through the school.

There are several ways in which the school may approach the domestic science problem. On the one hand, college courses in domestic science may be offered side by side with college courses for men in agriculture, engineering, architecture and finance. Again, domestic science work may be made a part of the required course in the high school. Neither the high school nor the college reaches the great majority of girls. For them, the eighth, seventh, or even sixth grade sees the end of their schooling. The real work of spreading domestic science knowledge will be done effectively only in these grades.

Besides the formal courses in domestic science,

there are springing up, in all parts of the country, schools devoted specifically to domestic science training. Notable among these are the home schools, of which that at Providence is a pioneer and an excellent example. Such a school consists of a home or a tenement, simply fitted out, in which the girls cook, sew, clean, wash, iron, tend the furnace, beautify the back yard, and do any one of the other tasks which falls to the housekeeper. Run by evening as well as by day, these home schools afford an excellent opportunity for working girls and schoolgirls alike to acquire a store of practical, first hand domestic knowledge.

Domestic science, well taught at home and in school, will prove an important factor in lowering living costs. The smallest income, well administered, is more efficacious in home organization than a large income, unwisely squandered. There is, perhaps, no plan for reducing living costs more immediately practical than one which will involve more advantageous buying and more efficient use of the products consumed in the home.

4. Consumer's Coöperation

The organization of consumers finds its expression in the consumer's coöperation which has proved so successful in the British Isles and in parts of the Continent. Begun less than a hundred years ago by a few weavers of Rochdale, England, who made wholesale purchases of groceries out of a common fund, the movement has spread, until it has reached immense proportions. The coöperative societies own retail stores, wholesale

houses, factories, steamers, and all of the paraphernalia of a great business.

The business of the coöperative societies abroad has continued to grow with unabated rapidity. Their patrons are numbered by the tens of thousands and their annual transactions by the hundred of millions of dollars.

Thus far the cooperative movement has made little headway in the United States. For this failure, various reasons are advanced. Private businesses are more efficiently managed; they sell on close margins; they are already operated on a large scale (chain stores and department stores); they have given the consumers the benefit of low prices without placing upon them the burden of investment. On the other side, it is urged that the salaries and rewards offered by private business are so much greater than those offered by cooperative societies that the able men all find their way into private business, leaving only second rate men for the cooperative ventures. It is further urged that the universality of opportunity and the mad rush after commercial success lead men to turn to private business as offering bigger, if less sure chances.

Whatever the cause of failure among coöperative societies in the United States, the fact stands. The Patrons of Husbandry, and the Knights of Labor, among many other organizations, at one time had consumer's coöperation organized on a broad scale. After an apparent success which lasted for a generation, the movements faded, one by one, until at the present time there are only a few scattering ventures here and there through the country. At present there

is every indication that a new cooperative movement is under way.

Consumer's coöperation, if it can be organized on a sufficiently large scale to be successful, effects considerable savings to the consumers. Whatever its ultimate success in the United States its achievements abroad justify Americans in looking toward it as one important means of reducing living costs.

5. Raising the Standard of Public Demand

The problem of social education is, at bottom, a problem of raising the standard of public demand. Thus far the public has been content to see the home administered on the same basis as the homes of yore. The voice of science has, with difficulty, penetrated the thick hangings of tradition which deadened the sounds within the precincts called "home." The hand of time dealt gently with home precepts, and the children found the home, and preserved it as it had been found and preserved by their fathers.

An essential part of the home tradition was bound up in the concept of home individuality. There was to be little common impulse and less common life. Each man, in his castle, was to reign supreme, free of the dictates of any other man. The individual home was to be a law unto itself, so the story ran, self-sufficient and self-containing.

The industrial and social changes of the past two centuries make the individualistic home an impossibility. Surrounded by myriads of other homes, centered in cities and great towns, the home assumes social relationship of which our forefathers, in the village houses of the eighteenth and early nineteenth centuries never dreamed. The home can no longer persist as an individualistic institution. It can, however, make headway as a part of a greater social unit, the city or the community.

The standard of public demand will be raised as the individual home with its inmates realizes its social dependence and its social obligations. By such a process, —coöperating in the expenditure of income, and collaborating in the preparation of knowledge about efficient home management, social education should establish a standard of public demand that may eventuate in lower living costs for the individual family.

$\mathbf{X}\mathbf{X}$

INCREASING THE EFFICIENCY OF FOOD DISTRIBUTION

1. FOOD THE CENTER OF INTEREST

THE individual family may exercise a measure of control over its cost of living by increasing the efficiency of buying and of using products. A similar gain may be made through a wise regulation of the means by which things are transported and transferred from producer to consumer.

Food is the logical center of interest in any discussion of the machinery engaged in transferring goods from producer to consumer. The worker's family spends two-fifths of its income for food. Furthermore, the knowledge about food distribution is more complete than the knowledge about the distribution of any other item in the family budget. Then too, a discussion of food distribution efficiency will throw light on the other problems in the distribution of goods.

2. MANKIND BANISHED FROM HIS KITCHEN GARDEN

The reorganization of industry called the Industrial Revolution, and the influx of people into the industrial cities and towns which the Industrial Revolution produced, has driven mankind from the kitchen garden. The village dweller was largely independent of re-

his kitchen garden, his domestic tailers. With animals, and his other means of secondary income, he was able to provide for his family a food supply at cost. No middlemen presented their charges; no jobbers were maintained out of the profits. The major portion of the villager's food supply went directly from producer to consumer. In the vast majority of the cases where the villager was himself the producer, doing the "chores" in spare time, there was not even a labor charge against the product.

Secondary sources of income are far less possible in the city than they were in the village. Almost everything which is used must be bought. Instead of procuring a part of his living through the expenditure of leisure time, the city dweller is compelled to buy all of it from the merchants. He no longer pays a cost price. The producer, the transportation agency, the jobber, the carters, the banking houses, and a score of others who participate in bringing the products from the producer to the consumer, must charge against the retail price some profit in order that they may continue in business.

The loss of the kitchen garden means a loss of direct communication between producer and consumer. intervening step which is introduced adds to the final cost of the product.

While the producer lived in the neighborhood of the city, milked his cows, cared for his poultry, picked his fruit and vegetables, placed them in a market wagon and peddled them at the consumer's door, there was still a fairly direct connection between the two. that connection has long since ceased to exist.

The food supply of cities comes from relatively distant points, through a large number of intermediate steps. Milk is produced on a farm a hundred miles distant from the city market. Vegetables are grown in Georgia and eaten in New York. The fruit of California finds its way to the fruit stands of Boston. The Michigan celery has a national market. Specialization in agriculture is impossible unless wide-spread markets can be secured. Improved transportation facilities, and the consequent possibility of marketing products over a broad area, have encouraged agricultural specialization, until a point has been reached where localities produce for national, or even international, markets.

3. REDUCING THE STEPS FROM PRODUCER TO CONSUMER

The cost of living may be materially reduced by reducing the steps between producer and consumer. The growth of cities makes the separation of the two inevitable. The distance of the separation may be materially modified by the adoption of certain measures calculated to eliminate unnecessary intermediate processes.

Waste should be eliminated wherever it exists. The presence of an unnecessary middleman involves waste; therefore his existence should not be tolerated. The failure to provide adequate means of transportation involves waste. The transportation facilities should be improved. Efficiency in food distribution is one of the imperative demands of growing industrial cities. Like any other problem, it can be met and solved only through intelligent, scientifically directed effort.

GETTING GOODS INTO THE CITIES

The processes involved in getting food products from the farmer's gate to the city flat are numerous and intricate in the extreme. Roughly speaking, there are two possibilities. Either the farmer may undertake to do the work himself, or he may depend upon some organized agency.

The farmer who undertakes to market directly in cities must rely upon horse or automobile power. He must have sufficient help to manage his farm, in addition to the help required in hauling. The limitations on hauling directly from farm to city are rigidly prescribed by the contour of the country and the character of the roads. Hauling by horse power is possible over fairly good roads for a distance varying from ten to twenty miles. The use of motor truck, which doubles the possible hauling distance, is out of the question unless roads are good.

If the farmer is to market directly, he must have sufficient capital to provide himself with hauling apparatus and an adequate labor force. He must, in addition, be located on roads sufficiently well kept to permit of heavy hauling at most seasons of the year.

The advantages of this direct relation between the farmer and the city consumer are manifest. The consumer is assured of the freshness and quality of the product, securing it, as he does, directly from the producer. The producer, on the other hand, secures an immediate return upon each transaction. There is no unnecessary loss due to middleman's profits.

Beyond the comparatively short range of hauling by horse or motor, and within that range for the farmer who has not the labor or capital, marketing must depend upon a number of intermediate agencies. In the first place, there is the country buyer or jobber who locates himself in a rural village, and buys certain kinds of products. Through such a buyer, the goods may be shipped in carload lots, thus considerably reducing freight charges. The buyer, a man experienced in markets and marketing, directs his shipments to those markets where the demand is most active.

The local buyer depends for his transportation upon railroad or trolley service. When his shipments reach their destination, they pass through the hands of one or more jobbers, who dispose of them to the retailers.

5. Markets and Terminals

Considerable attention has been paid in recent years to the organization of markets. Products consigned to city commission merchants have been wantonly destroyed in order to raise prices; commission men have made false returns to producers regarding the prices received; groups of commission men have combined to hold up the price paid for products by retailers. These practices may be or may not be prevalent. Instances of such practices are on record, however, and they must be reckoned with in any consideration of the marketing problem.

One great asset in price regulation has been the coldstorage plant. Perishable goods can be kept in cold storage from a period of surplus to a period of scarcity. By utilizing the cold-storage plant large stocks can be accumulated and held in the face of a high demand, thus forcing up prices to an abnormal extent.

There is no evidence that cold storage has raised the general level of prices; there is every indication that cold storage has stabilized prices over a period of time, and that it may be used for the purposes of price manipulation.

Cities may effect considerable modifications in the cost of their food supply through a proper regulation of terminals and markets. In the first place, both railroad and trolley companies may be led to establish and maintain adequate terminal facilities, as well as terminal markets. By this means the food supply shipped in at any time can be efficiently cared for.

The methods of handling terminal markets may likewise assist in the reduction of food costs. A number of European cities license commission men who sell under bond in the wholesale markets. means, the possibilities of fraud are greatly reduced. In other cities, farmers' markets, both covered and uncovered, are maintained, where the farmers may draw their produce wagons up to the curb, or where they may rent stalls at cost, and sell their products directly to the consumer. In either case the uncertainties incident to the operation of privately owned markets are largely eliminated. The city market thus performs a real service in facilitating the distribution of food.

6. PRODUCERS' COÖPERATION

Both the city and the state can aid the consumer in securing food products at a lower cost by distributing news of marketers and markets. Bulletins published in the daily papers, posted in local post-offices, or sent out through the mails, may be employed to advise both producers and consumers of the state of the market. Through such information the producer will be enabled to take his goods to the most remunerative market, while the consumer has an opportunity to buy at the lowest figure. Such information is peculiarly valuable in a large city, where variations in retail prices are considerable.

The profits of producers have been materially increased both here and abroad by means of producers' coöperation. Dairymen, fruit growers, truckers, and other producers form organizations through which they buy and sell their products.

There is no evidence that producers' coöperation materially reduces the price to the consumer. There is evidence, however, that it results in considerable advantage to the producer. There is also evidence that the consumer receives better service through the guaranteed quality of the goods which producers' associations turn out.

This discussion has been confined almost wholly to the food supply, first, because the expenditure for food constitutes the largest single item in the budget of the ordinary family; and second, because the possibilities for reducing the cost of foods and service are so much greater than the possibilities of reducing the cost of clothing and other manufactured products. Here, also, there are opportunities for price reductions. The mail-order house and the manufacturer who sells direct have both had a considerable effect in modifying prices. There is, of course, a tendency on the part of the mail-order house and manufacturer to convert the

savings which are effected through the elimination of middlemen into profits for themselves. This tendency is offset by the counter necessity of keeping prices at least as low as the prices of retail products, in order to secure trade. In the case of mail-order houses, prices are kept generally lower than those of the ordinary retail dealer.

The reduction in the cost of living that may be effected through increasing the efficiency of food distribution is problematical. It is, however, of material The city and the state of the future will be extent. called upon to play a continually growing part in the regulation of the conditions under which food products are transported from producer to consumer. ing efficiency and improved methods will eliminate those intermediate steps which involve inefficiency or Education and wide-spread knowledge will increase the consumer's desire to establish more direct relations with the producer.

XXI

CONSERVATION AS A MEANS OF REDUCING THE COST OF LIVING

1. A SOCIAL TASK

Conservation, meaning "wise use," necessarily carries with it the thought of providing for the future. Each generation conserves in order that the next may use and enjoy. The idea is essentially social, since conservation takes the form of a duty, owed by the society of the present to the society of the future.

The movement for conservation has as its chief end the conservation of natural resources. Coal, iron, water-power, soil fertility, are gifts which nature has bestowed, and which man may use or abuse. If these gifts are used wisely, the service which they offer to mankind may be enjoyed by numberless generations. If they are ruthlessly destroyed the present bankrupts the future. The gifts of nature are, in a peculiar sense, gifts to all. The right to them on the part of those who live in the present is a right to wise use alone.

May conservation be relied upon to reduce the prices of commodities, or at least to check the rapid rise in price? There seems to be little question but that conservation is an essential element in price control.

The cost of living pinches hardest in the neighborhood of natural resources. The rise in prices is most

rapid in the case of those commodities derived directly from the land. The price of farm products, the price of timber products, and the price of mineral products have led the onward march of price advance. If it appears that there is waste or inefficiency in the use or administration of natural resources, or if those resources might be added to through some conservation practice, then conservation would obviously act in the direction of price reduction.

2. Conservation Possibilities

There are, from the standpoint of the conservationist, three classes of resources, -those which are irretrievably destroyed by use, those which, when destroyed, may be replaced, and those which may not be destroyed. In the first class fall minerals and fuels. Each ton of coal or of ore mined is a ton less in the natural treasure house. So far as science can say, no considerable addition is being made to the supply of minerals and fuels. Their quantity is fixed and use destroys them permanently. The second class of resources is destructible, but replaceable. A timber tract, cut over, may be reforested. Soil fertility, exhausted, may be restored by a resort to scientific agriculture. Over the supply of timber and of soil fertility man has as definite a power of control as he has over the wheat supply. A third class of resources-water-power, waterways, and water for irrigation purposes-is indestructible. These resources may be improved or neglected. Their potentialities always remain. Each one of the three categories presents an essentially different problem in conservation.

Mineral resources, limited in amount by the limitations on supply, may be wisely and efficiently used in the interests of the future. There is no justification for the wanton abandonment of mines before the minerals are fully exhausted. From the mine refuse, all possible commercial value should be extracted. The mining of minerals presents, at best, few direct conservation possibilities. The greatest hope for mineral conservation lies in the utilization of substitutes. Waterpower may replace coal; cement may replace steel. By such substitutions the supply of power or of building material may be indefinitely increased.

This process of substitution has only one drawback from the standpoint of the cost of living,—the price of the substitute is regulated by the price of the disappearing resource. Here is a case in point.

Fifty years ago a well-to-do man bought a beautiful waterfall, near his native city, for three thousand dollars. The water fell more than two hundred feet in a series of cascades. The philanthropist decided to convert the place into a public park, where his fellowcitizens might enjoy themselves. Industrial possibilities changed his plan. The development of power through water-generated electricity made it possible to drive a shaft, conduct all of the water from the top of the falls to the turbines below, and by this means to convert a three-thousand-dollar waterfall into a power plant generating enough electricity to run all of the industries within a radius of a hundred miles. When the plant was completed, it must set a price upon its services. What price should it set? The falls had cost a trifle; the construction had been comparatively

inexpensive; the power might be sold at an extremely low rate. Were such facts taken into account? Not for a moment. "This is our plant," so the reasoning ran. "We have risked our money and devoted our brains to the enterprise. We want all we can get out of it. What price will we charge? We will fix a price just below the cost of power made from coal. That will give us the business, and at coal prices."

Monopolists always fix prices at a point of maximum advantage. Costs of production do not figure. The rule of monopoly price is,—" All that the traffic will bear."

The substitution of a newly discovered advantage for an exhausted, high-priced resource, will result inevitably in a price fixed by the monopoly rule so long as private monopoly is permitted to continue. The rule is easy of application. Its use is general. While monopoly of resources is permitted, no material lowering of prices can be looked for in the discovery of new resources or in new uses for old ones. Prices will be fixed on the monopoly basis.

3. THE CONSERVATION OF TIMBER LAND AND OF SOIL FERTILITY

The conservation of timber land and of soil fertility involves science, wise use, care, and maintenance. There is some element of monopoly in the timber supply, yet the exhaustion of timber at a rate far more rapid than the rate of growth necessarily adds to its price.

The conservation of timber land is a problem that may be solved in only one way,—by reforestation on a

sufficient scale to provide for the normal lumber demand. The price of lumber will be high in the future. None of the substitutes that have been discovered, none of the changes in building methods, has seriously decreased the demand for lumber. Only when forestry becomes a business; only when reforestation, public or private, is resorted to as an investment, will an effective check be put upon rising timber prices.

Aside from assuring a stable supply of lumber, reforestation will supply a covering for the hills. traveler through the once thickly wooded mountainous districts of the United States is impressed by the immense extent of barren, brush-covered hillside, which affords a ready foothold for the fires that sweep across the country, damaging or destroying whatever young timber there is, and burning the dead leaves and dry moss which are scattered about. Forest fires are in themselves often disastrous. It is estimated that during the past hundred years the quantity of good timber destroyed by fire in the United States has been as great as the quantity used by men. Numerous lives have been lost, and whole villages overwhelmed. Scientific care of the forests would eliminate much of this waste, and prevent such disasters.

Even more persistent than the forest fires are the floods which occur year after year. The hills at the headwaters of streams are depleted of timber; fires burn off the leaves, moss, and decaying twigs; the ground, left hard and bare, sheds the spring rains like a duck's back. Instead of soaking into the spongy mass of vegetable matter on the forest floor, and filtering gradually into the springs, the rain runs at once

into the streams. For a month there are floods, doing damage to the extent of millions, or hundreds of millions. Then August and September come. The hills are parched, the springs and wells in the valleys are empty, and drought plays havoc with hills and valleys alike. Flood and drought follow logically in the train of bad methods of forestry.

The argument for reforestation and conservation of timber lands is too logical and too trite for restatement; yet the fires and floods rage, and the American forest-conservation policy is still in its infancy.

The conservation of soil fertility is even simpler than forest conservation. The only prerequisite for the conservation of soil fertility is wise farming.

The soil gives to plants certain food elements,—nitrogen, phosphorus, potash, carbon, and the like. It likewise provides the medium in which plants may grow. This medium is a soil open and light enough to receive the tiny rootlets, and sufficiently spongy and porous to retain a water supply. The most important source of both plant foods and of good soil tilth alike is humus.

Humus is vegetable matter in the process of decay. It serves a double purpose. The disintegration of the vegetable matter supplies nutritive elements for the plants; the humus loosens up the soil, keeping it light and friable. No application of mineral fertilizer, and no amount of soil cultivation will make up for a shortage of humus. It is an absolute essential to soil wellbeing.

The prophets of evil who predict soil exhaustion find a negation of their teachings in the possibilities of replacing humus in the soil. Only recently have agriculturalists come to appreciate the full advantages of cover crops,—green crops, usually of some legume such as soy beans, vetch, and cow peas, which are sowed to be plowed under. Some of these crops produce a generous growth of leaves and stalks. All of the legumes have on their roots small deposits of nitrogen (nodules), which add to the nitrogenous plant food in the soil. An interplanting of cover crops with standard crops (for example, vetch or soy beans between corn at the time of the last cultivation) leaves something on the soil to prevent wash, and at the same time furnishes a supply of humus and plant food, which does much to maintain the soil fertility.

The conservation of forests and of soil fertility have ceased to present serious problems to the scientist. Science has already contributed ample assistance in both directions. It remains for society to follow her behests, and the excellent example which certain European countries have set in the rehabilitation of forests and the restoration of soil values.

4. The Conservation of Water Resources

Water resources cannot be destroyed. Their conservation becomes a matter of eliminating monopoly, and of rendering the most efficient service at reasonable prices. This practice already obtains in the case of governmental irrigation projects and of navigable rivers. Time alone will tell whether the people of the United States are sufficiently far-seeing to apply the same principle to the water-power development on which the future will so largely rely for its mechanical energy.

The chances for water-power development are wellnigh limitless. With the instance of power development mentioned in a previous section, contrast the development of navigation in harbors and in navigable rivers. The government sluices, dredges, and regulates. The country pays the cost of the business. The service is of high quality, well rendered. Its cost is slight.

Suppose for a moment that a private corporation had owned the New York Harbor and the Hudson for the past century. Each improvement made would have been capitalized and entered as investment. Each service would be charged for, not at its cost, but on a basis that would pay dividends on the capitalization of improvements. The commerce entering and leaving New York would be held in the grip of a monopoly which would exact "all that the traffic will bear." The result would be an increase in the price of every commodity which entered or left New York Harbor.

The issue is an issue between investment for profit and monopoly for profit on the one hand, and service on the other. The aim of the private enterprise is to pay dividends. The aim of the government is to render service.

There is probably no man of commercial experience who would advocate private ownership and control of New York Harbor. The advantages of public control are too obvious and too well established. The dangers of private manipulation are too vast. The experience of the United States with the reclamation projects in the West has been of a similar nature. The government reclamation service, under efficient management, has performed miracles of engineering skill, turning whole

rivers from their channels, and converting thousands of acres of desert into fertile orchards and fields. This work has been done at cost. No monopoly price has been exhorted. None of the burdens of inflated values have been heaped upon the buyers of the land. They have taken it at the cost of building and maintaining the irrigation system.

The issue which the United States faces in the development of water-power sites is similar in many respects. The coal supply is being gradually depleted. More and more of the power used in American industry will be derived from water. Shall this power be paid for at cost or shall its price be set by the monopoly formula "all that the traffic will bear"? The issue is clearly drawn between private profits and public service.

5. The State as a Conssrvator

Conservation is a long-time investment. An individual may reap the benefits of soil conservation. He will scarcely live to see the results of forest conservation, nor is he affected in any marked degree by the conservation of mineral resources. As an individual, he is powerless to prevent water-power monopoly. Conservation, concerned as it is with long periods of time, and great bodies of people, is a social, and not an individual problem. The state must therefore act as chief conservator.

The democratic state is the embodiment of group life and group activity. The citizens delegate powers to their government, and look for service in return. The state exists as a means of enhancing the general welfare of the community.

The state does not live in one generation, as does the individual citizen. Citizens come and go. The state remains. Citizens have varied, and often conflicting, interests. The function of the state is to act in the interest of all. Therefore it is peculiarly fitting that the state should deal with a problem like conservation which is in every sense a social problem.

The possibilities of conservation are immense. They cover that entire range of activity which is engaged in taking wealth out of the earth. Since these are the occupations in which the greatest price increases have occurred during the past two decades, conservation offers a means for checking, or at least modifying, price increases, in so far as they affect the products of land. This is peculiarly true in the case of a monopoly like that over water-power sites. Left to themselves, the water-power owners will charge a price slightly below the price of coal power,—a price equal to "all that the traffic will bear." If the people at large are to benefit by such improvements, prices based on the cost of production, and not on monopoly power, must prevail.

The individual states can play the leading rôle in the conservation of agricultural lands. Agricultural high schools and colleges, extension work in agriculture, agricultural experiment stations, and publications dealing with agricultural problems, will naturally raise the standard of agriculture. The Federal government will continue to be, as it has been in the past, a patron of agricultural education and activity. Each state can, however, carry a large share of this burden.

The conservation of mineral resources, the regulation

of resource monopoly, and the reforestation of deforested areas, likewise fall within the scope of state activity; but here the Federal government will unquestionably be called upon to enter, because of the failure of some states to provide adequate means of conservation. This will be true particularly in the case of reforestation, and the control of water-power, both of which are interstate in their influence, and both of which many states have signally failed to understand.

During decades and generations conservation may work wonders in price regulations. As a long-term investment, however, it falls logically within the province of society, rather than of any individual citizen.

IIXX

INCREASING THE EFFICIENCY OF LABOR

1. WHAT IS LABOR EFFICIENCY?

INCREASED efficiency is a term which conveys the idea of securing a given return with a lessened outlay, either of labor, of capital, or of some other factor involved in the productive process. Increased efficiency means increased facility in arriving at a desired result. Efficiency is conservation of effort.

The ways in which efficiency may be increased are innumerable. From the computing machine, which makes easier and more certain the procuring of mathematical results, to the chilled steel plow, which raises the standard of agricultural production, the standard of efficiency is being constantly raised.

Can labor efficiency be increased? Can science, applied to man's productive efforts, accomplish results similar to those which have followed the application of scientific methods to the training of athletes? The answer seems to be unanimous in the affirmative. Men can be made more efficient if they learn to apply their energies scientifically. Modern productive enterprises are carrried on largely with the aid of machinery. The character of the tools which labor uses very largely determined the efficiency of the labor. Combined with well-directed physical energy, perfected mechanical appliances serve to increase the efficiency of labor in production.

For the purpose of the present discussion, attention will be centered upon the increasing efficiency of physical energy. The important steps which the past has taken in the improvement of mechanical efficiency have resulted in marked savings. Almost all cases of price reductions during the past twenty years are traceable to improvements in methods of manufacture, —to increase in labor efficiency. The progress of the nineteenth century was based primarily upon the increasing efficiency of labor in production.

The development in mechanical appliances and methods may be traced to one of two sources. On the one hand, scientists, working in the laboratory, have evolved more effective methods of doing things; on the other hand, mechanics, at work in industry, have improved and perfected mechanical devices. Therefore, an increase in knowledge and in skill may be looked to as a source for further increasing the efficiency of labor.

2. EFFICIENCY THROUGH KNOWLEDGE AND SKILL

The whole world-wide movement for better technical education has as its object an increase in the knowledge and skill of labor. Trade schools, technical high schools, agricultural and mechanical colleges, manual training in the grades, are all aimed at the same general goal. There is another side to the question,—the individual wishes to improve his technical ability and equipment before taking up his special line of work. Pursuant of this desire, he calls upon the school to furnish him with a course that will increase his efficiency.

The desire of the employer or of the prospective employee for technical training finds expression in the increasing emphasis which the world of industry is placing upon educational attainments. In certain branches, such as engineering, college men are given the preference. Indeed, great projects like the New York Subway and the Panama Canal have been built by college trained engineers. Some employers, finding men in the ranks who display the ability of leadership, send them to college and pay the bills. Numerous plants maintain schools in which their employees are taught the technique of the business. This is as true of department stores as it is of machine shops. As specialization increases, there is an increased insistence on knowledge and skill, which make up so large a part of industrial efficiency.

The demand for increased knowledge and skill is a demand that applies with peculiar force to the comparatively small group of higher class workers. remains that great body of semi-skilled and unskilled men and women who make up the rank and file of industry. For them the chief efficiency requisite is good health.

3. Efficiency Through Improved Health

The necessity for good health is omnipresent. class of workers can afford anything less. High skilled and low skilled alike are affected by it, yet it is among the low skilled, where health and bodily vigor are the chief asset, that health is most imperatively needed.

Innumerable estimates have been made concerning

health in the United States. The Committee of One Hundred on National Health recently went over all of the ground, rounded out an elaborate study and published it in summary form.¹ There is no doubt that ill health is a serious menace to efficiency. On the one hand, fatigue, due to over-exertion, fills nerve centers and muscle tissue alike with poison. On the other hand, the germs of disease fasten themselves eagerly upon the system thus poisoned with fatigue. Those who are suffering from over-fatigue, resulting in devitalized systems, from severe forms of sickness, and from minor ailments, number many millions.

The logical outcome of this prevalence of overfatigue and of disease is premature death. The Committee of One Hundred estimates that in a given year about half of the deaths in the United States are "premature." That is, they are due to causes over which society has a potential control which it has failed to exercise.

The effects of premature death upon efficiency are threefold. First, premature death eliminates from the community large numbers of men and women on whom society has expended training and effort. These are eliminated before they have an opportunity to render a return proportionate to the outlay of energy involved in giving them their training. Second, as men and women advance in life they become, in most cases, constantly more valuable to society. The years between forty and sixty should yield a maximum of service. Third, the loss by a family of the wage

^{1 &}quot;National Vitality," Irving Fisher, Washington Government Printing Office, 1909.

earner involves a potential or actual family dissolution that bears rigorously upon the children. Perhaps they are forced to leave school and to work. Perhaps they are underfed. Perhaps they are placed in institutions or in strange families. In any case the efficiency of the next generation is menaced.

4. MAKING IT WORTH WHILE FOR LABOR TO BE EFFICIENT

There can be no serious question but that improved health together with increased skill and knowledge are making for greater efficiency. Another question of serious importance arises. Is it worth while for labor to be efficient?

From many sides a note of alarm has been sounding. American labor is soldiering! The men and women do just as little as they are compelled to do in order to hold their jobs. They are trying to get the most pay they can for the least work. They are grafting on their employers.

No one familiar with industry can deny the truth, or semi-truth of some of these statements. The "something-for-nothing" spirit has taken firm hold of many phases of American life. From the boards of directors to the common laborers, from the governor's chair to the door-tender's stool, the graft spirit has been found. In the professions and in commercial fields it may be pointed out. There are time-servers in every walk of life. Labor has no monopoly of the practice.

The developments of present day industry have resulted in a specialization and a stratification of jobs which present a very discouraging aspect to the be-

ginner in industrial life. A new set of books is introduced. The old bookkeeper at two thousand is replaced by a new man at twelve hundred, who accomplishes the same result. A machine is invented. An unskilled man, guiding the work of the machine, replaces a highly skilled mechanic. A high salaried, experienced man is removed and a man just out of college takes his place and installs a system. room at the top is narrowing. There is scarcely an important industry in the United States in which the proportion of superintendents, managers and general officers on the one hand, to clerks and wage-earners on the other, is over five in a hundred. There are a number of industries in which the number of officers bears an even smaller relation than one per cent. The railroad industry, for instance, reports one general officer for each three hundred employees. This distribution of jobs has been worked out as a detail of industrial efficiency. One general officer is sufficient to direct the work of three hundred men. What incentive have the three hundred to strive for that one job, when 299 are sure to lose out? The rewards at the "top" of industry are so remote that they no longer appeal to the imagination of most men.

Scientific management is lauded as a boon to industry. In one sense, it is a boon, because it increases output, yet a reading of the literature published by its champions fails to show a case where the wages of the men who are expending more effort to keep the new pace are increased in proportion to the additional effort expended. In most cases, indeed, the increase in wages is but a tithe of the increase in product.

Scientific management has picked up lost motion. That is well. Scientific management has eliminated unnecessary processes. In so far it is worthy of commendation and adoption. On the other hand, scientific management has increased the demands on labor energy without a corresponding increase in remuneration. that extent, it has thrown a wet blanket on increased efficiency.

There is another element which makes workers question the worth-whileness of increased efficiency. The worker in modern industry is never paid in proportion to his production. His wage is fixed, on the contrary, at an amount which is the equivalent of the amount for which some one else will do the same work. An American workman is earning two dollars a day. A Slav offers to do the same work for a dollar and a half. If he is equally efficient, his offer is never refused. That fact explains the frightfully low wages paid in those industries where immigrants compete with American workmen. The "piece rate" method of payment is no exception to this statement. The piece rate is fixed at a figure which will enable the worker to make a "fair wage,"-that is a wage equivalent to that ordinarily paid for similar labor. When the worker increases his output to a point where he makes more than a "fair wage," the piece rate is cut.

Efficiency must be made worth while. Stratification and standardization of industry, scientific management, and the payment of wages which represent cost of replacement rather than amount of product, must be so modified and reshaped that the worker finds an increasing pay envelope corresponding to his increasing efficiency. Unless it is worth while for labor to be efficient, labor efficiency is out of the question. When industry makes it worth while for labor to be efficient, the resulting increase in labor efficiency will prove a vital factor in decreasing the cost of living in the case of those products which depend largely upon labor for their production.

XXIII

INCREASING THE EFFICIENCY OF EXCHANGE

1. A More Stable Medium of Exchange

THE increased efficiency of exchange would undoubtedly be an element in reducing or at least in stabilizing the cost of living. A complex industrial and commercial society depends upon the medium of exchange for the measurement of its values. The medium of exchange should, above all else, be stable. Stability is as essential to a medium of exchange as is a universal recognition of its value.

Gold is the medium of exchange accepted by the commercial world. As already pointed out, the amount of gold has recently increased in a constantly growing ratio, thus rendering its value in terms of other commodities less and less.

No one contends that gold is any longer a stable medium. Indeed, it might be described as relatively unstable. The exchange of the world is being carried on through the use of a medium of uncertain value. The remedy is obvious,—find a medium which will be of certain value.

Theoretically it is easy to make a medium of certain value. Practically it is almost out of the question. The commodity used as money must be of intrinsic value, durable, divisible into units, and

easily transferable from place to place. Gold answers all of these requirements. It fails to meet the additional requirement of stability. The stability requirement is a wholly impossible one, however. The supply of the commodity must increase as the demands of business increase,—no faster and no slower. Discoveries of new fields or of new processes of manufacture must have no effect in suddenly increasing the supply. In the modern world of commerce and scientific research, such a situation is manifestly impossible.

Men have proposed platinum as a medium of exchange. Platinum would satisfy all of the requirements that gold satisfies, but suppose that, at the end of the thirty or forty years necessary to persuade the commercial nations that it should be adopted, some careless scientist were to discover a means of extracting platinum that would double the supply in five years! The commercial world would face the same exigency that it now faces with gold.

The difficulties in the way of stabilizing an exchange medium seem insuperable. Unless some artificial restrictions are placed upon the supply, no commodities can ever be made stable as a medium of exchange.

2. The Control of Gold Mines

One measure is suggested that might effect the desired result. The government might control all of the sources of the gold supply. Such a suggestion involves two obvious corollaries. On the one hand, since the sources of gold supply are now world-wide, there must be an international agreement, limiting the

supply of gold taken from existing mines. An even more important duty than the control of the present gold supply would be the control of new sources of supply, and of new methods of extracting gold from ore.

3. A COMPENSATED DOLLAR

The attempts to secure a regulated supply of gold are based on the supposition that the quantity of gold produced can be limited, and the medium of exchange thus standardized. Such a scheme might work admirably so long as the potential production of gold increased. Suppose, however, a time to be reached at which the demand of commerce far outran the world's possible gold supply. An international commission might conceivably place a maximum limit on gold production. Over the minimum limit, Nature and science or Nature alone presides. When the gold supply is exhausted, there is an end of the matter.

This difficulty may be overcome, insist a number of economists, by coining a compensated dollar. This dollar will be at once stable and elastic. It can be made large or small as the case demands.

The present dollar is a quantity of gold. Congress has declared that 25.9 grains of gold is a dollar. No matter how plentiful gold may be, that number of grains is still a dollar. The advocates of the compensated dollar insist that, instead of fixing the quantity of gold in the dollar, the amount should be flexible and the value stable.

The dollar would be made flexible or compensated in the following manner. The prices of some fifty

leading commodities would be compiled and a standard established at 100. In the course of six months, this average price or index number shows that prices have advanced so that they stand at 101. That is, an amount of goods that could be purchased six months ago for \$100 now requires \$101; or, an amount of goods that could be purchased six months ago for 2590 grains of gold now requires 2615.9 grains (an increase of one per cent.). Very well, then, comment the advocates of the compensated dollar, place 259 thousandths of a grain additional gold in each dollar. Then one hundred dollars or 2615.9 grains of gold would buy as much in commodities as it did six months previously.

The compensated dollar scheme has numerous ardent advocates, who insist upon its validity. It is open, however, to serious objections. First the value of a given coin would never be definitely ascertainable; second, gold must be recoined each time the dollar was adjusted; third, it would necessitate an international agreement; fourth, the scheme would not work under falling prices.

The first two objections are more technical than fundamental. So long as a quantity standard of money is adhered to, it would seem desirable to maintain the quantity in a given coin constant. This could be accomplished only through a constant recoining of all gold coins. The technical difficulties involved in calling in large numbers of coins is practically insurmountable. For months after the standard was rear-

¹ "A Compensated Dollar," by Irving Fisher, Quarterly Journal of Economics, Vol. 27, Feb., 1913.

ranged, there would be two grades of money in the community.

Like the proposal for a governmental control of gold mines, the agreement to compensate coinage must be international in order to be effective. Should each government have a commission which periodically changed the value of its coinage, international exchange could be so uncertain as to be impracticable. Each transaction would be made subject to adjustments in the size of the exchange medium in the two countries between which the transaction took place.

The plan of compensating the dollar would fail with falling prices. So long as prices are rising, and an increased amount of gold is placed in each successive dollar, the government might call in and recoin the money. Should prices be falling, however, and a less amount of gold were placed in each succeeding dollar coined, the old dollars would be melted privately and sold as bullion, because in that form they would command more than a dollar in the new coinage. There seems to be no answer to this objection.

4. FIAT MONEY

Adherence to a quantity standard of money involves, either in the case of gold mine control or of a compensated exchange medium, an international agreement to make the plan effective. To be sure, the present unstable basis may be retained, but if a change were to be made, and an international agreement secured, it would seem more sensible to abandon quantity money, particularly in view of the fact that the chief argument in favor of quantity money is the impossibility of

persuading all commercial nations to adopt anything else. If the nations will come together on compensated coinage, why not on fiat money?

The proposal for the issue of fiat money is not new. The question may pertinently be asked, however,—"Have the commercial nations of the world reached a level of coöperative intelligence which would permit of the use of fiat money?"

No one nation can issue fiat money. In the course of international transactions, any nation which attempts such a plan is inevitably worsted. It is, however, entirely possible for the commercial nations to organize a commission on international trade, empowered to issue a medium of exchange, acceptable at par in all commercial nations. Instead of declaring that so many grains of gold is a dollar or is a sovereign, such a commission would stamp on a piece of paper,—"This is a dollar." Thereafter this paper would circulate at par and would be the measure of all values.

The use of fiat money presupposes confidence and intelligence. The training which the use of checks and drafts is giving will ultimately provide both.

At the present time, the commercial transactions of America are carried on by means of orders (checks or drafts) drawn against imaginary bank deposits. If all of the depositors in the banks of the United States were to demand their money the day after to-morrow, the great majority of them would come away penniless because the law compels the banks to carry only a small percentage of deposits in cash. The rest is lent out, or converted into credit. It is against this credit, —built upon no more stable foundation than business

integrity and confidence,—that the business world draws and accepts. The step is not long from private paper, issued and accepted on "credit," to an international paper, issued and accepted on international credit and confidence.

The possibility of international flat money may be immediate or remote. It is becoming increasingly clear that the medium of exchange will not be finally stabilized until there is an international resort to flat money.

5. PRIVATE CREDIT ASSOCIATIONS

Private banks and private persons will continue to extend credit until credit is made a matter for governmental action. Meanwhile, it is extremely important that credit in certain forms be more generously provided.

Private banking in the United States has been developed to a point which permits the great industrial enterprises which can deposit convertible collateral (stocks, bonds, and the like) to secure credit to any reasonable extent. At the same time, the little man, or the great man in the making, finds it difficult or impossible to secure credit extensions.

A small business man, with no reputation behind him, either good or bad, finds himself in a business world where transactions are carried on by means of credit. He also discovers that the men who have made a success in business have no difficulty whatever in securing credit, while he, as a beginner, with little backing and less capital, is practically shut out from credit securing possibilities. Without credit, a business man is helpless. The big man gets credit much more readily than the small man. Therefore the big man, at the very outset, has an immense advantage over the small one. His previous success gives him a momentum which makes competition with him difficult, or impossible.

The situation of the farmer is similar to that of the small business man. His only collateral is his land. Most farm land is a drug on the market, valuable so long as a man wishes to farm it, but immensely difficult to dispose of. Therefore the banks hesitate to extend credit on so unconvertible a piece of collateral as a farm mortgage. The city business man with his rapid turn over of capital and his readily salable property finds himself at an immense advantage over the farmer.

The small business man and the farmer may both be assisted through coöperative credit associations. In Germany, France, and Italy, these associations, fostered by the state, have done much to facilitate the extension of credit among men of small means. There seems to be no good reason why they should not become as strongly rooted here as are the building and loan associations.

6. SOCIALIZING CREDIT

The real line of advance seems to lie in the socializing of credit. Credit is to-day in a position similar to that occupied by money three centuries ago. Then money was the medium of exchange. Now credit is the medium of exchange, particularly in large transactions. There was a time when money was issued by

any one who cared to coin it. To-day, even state banks are denied the right to issue money. Experience showed conclusively that money must be issued by a central, generally recognized authority.

The time has come when credit is the generally used medium of exchange. Issued by private agencies, it is subject to monopoly and abuse of various kinds. There seems to be nothing short of a government issue of credit which will finally clear the commercial atmosphere, and place the exchange medium on as stable a foundation as that now occupied by government coinage.

7. INTERNATIONAL MONEY AND CREDIT

No one questions the desirability of securing a stable exchange medium. There is a difference of opinion only as regards the method of achieving this result. The discussion in the present chapter leads inevitably to one conclusion,—since exchange has become so largely international, and since all proposals for reorganizing exchange must stand the test of their effect upon the commercial relations existing between various nations, that therefore the medium of exchange must be finally adjusted on an international basis.

There are indications that with the increasing intimacy of international commercial relations, standards of weights, of measures, and of values will be adjusted on an international basis. That this adjustment will be slow,—none can question. That it is inevitable seems equally obvious.

An increased efficiency of credit may be derived

either through private credit associations, or through a socialization of credit in the hands of the central government. Both methods will probably be adopted until the former is absorbed by the latter. Meanwhile stability in the medium of exchange can best be secured through international agreement. Such an agreement should have a far-reaching effect in bringing about increased price stability.

XXIV

THE REDUCTION AND ELIMINATION OF MONOPOLY PROFITS

1. What is a Monopoly Profit?

THERE is every probability that simpler living, self-service, social education and conservation together with the increasing efficiency of food distribution, of labor, and of credit and banking, will materially influence the cost of living. All of these avenues call for long distance views, and long distance statesmanship. To the American demand "be quick about it," they offer little consolation. The case for impetuosity is not lost, however, since there is at least one field for immediate, drastic action. That field is none other than the elimination of monopoly profits.

The question at once arises,—"What are monopoly profits?"

The ordinarily accepted definition reads that "monopoly profits are profits over and above those which could be made under free competition." This definition in terms of competitive conditions is a survival of the competitive era. During this era, producers, by competing with one another, lowered the price of the product to a level which allowed them a profit representing a return for risk and organizing ability. There was always more productive power than there were consumers, so ran the theory. If productive

power was short in any direction, the rising returns from that industry would attract capital and enterprise until the competitive level was again reached. Therefore there were forces constantly at work driving prices down to a level that would admit of a profit equal to a return for labor and risk.

This theory of competition rendered the definition of monopoly profits easy. Any profit above the fair or competitive profit was a monopoly profit.

2. The Prevalence of Monopoly

The economists who insisted on the competitive basis of monopoly profits had never been brought face to face with a monopolistic régime like that now dominating the United States. Producers have waged cutthroat wars with one another, until experience has taught them two things. First, competition might ruin the successful as well as the unsuccessful competitor. Second, whoever won, the consumer and not the producer was the beneficiary of the competition régime.

Competition was dangerous in the extreme,—almost as dangerous to the successful as to the unsuccessful competitor. Many a successful man, at the end of a price war, has gazed around him at the havoc wrought by the struggle, has estimated the cost in health and effort, and has then wondered whether, after all, it really paid. Certainly it did not pay, in business returns, even for him. It had ruined the man who lost.

The consumer liked competition because it did pay. A price war meant cheap goods. Competition spelled

plenty for the housewife. Therefore the consuming public was an ardent supporter of the competitive régime.

3. THE BASIS OF MONOPOLY POWER

The manifold experiences of business triumphs and failures combined with a number of other factors to convince the producer that while competition might be the life of low prices, it was the death of profits. He sat down with a fellow manufacturer at a quiet luncheon, and whispered this idea to him across the table. The other blushed guiltily. He, too, had reached the same conclusion, though he had never dared to breathe a word concerning it. The little luncheon gave place to a larger one, out of which grew a manufacturers' association; a gentlemen's agreement; a trust; or a combination. The idea spread like wild-fire and producers began to take care of themselves through the sure channels of trade coöperation and organization.

The different forms of coöperation were variously effective. The association with its dinners and conventions gave men in the same line of business a chance to form speaking acquaintances with each other. The gentlemen's agreement bound producers loosely together. They agreed to fix prices; to sell only certain lines of goods; to sell only within a certain territory, or only under certain conditions. The agreement was unenforceable at law, but the erstwhile competitors had seen a great light. They realized the superiority of coöperation over competition and kept well in line. The trust and the combination were formal and legal.

Great funds of capital were aggregated under the direction of one group of men. Entire industries were brought under the control of one corporation. Even though there was no monopoly in theory, there was no longer active competition in practice. Thus, through a series of "get-together" devices, the era of competition gave place to the era of coöperation and combination.

With the cessation of competition, the consumers found themselves face to face with a pressing necessity of taking care of themselves. Prices were no longer fixed on a competitive basis. Some prices rose mightily. Others failed to decrease in proportion to the greater efficiency of production. The consumers had depended for price regulation on a cut-throat war between producers, and the producers had declared a more or less permanent peace.

The transition from competition to combination led to a new definition of monopoly profits. They could be estimated no longer on the basis of a competitive price level, because there was no competitive price level. Some substitute for the competitive price level was necessary. The one most easy to apply was the "cost of production." Therefore, at the present time a monopoly profit is defined as a profit in excess of a fair return on the actual costs of conducting the business.

The difference between a competitive price level and a cost price level is theoretically very small. Competitors were supposed, by their competition, to reduce prices to a point where they yielded only a fair or reasonable profit. Those who advocate the fixing

of prices on the basis of cost insist that the theory behind competition be made the basis for regulation. Whenever a price is maintained at a point that yields more than a fair return in the actual cost of conducting a business, then a monopoly profit exists. This definition does not allow a business to first capitalize its earnings, and then allege the charges on this capitalization as one of the costs of its business. Cost prices are figured on the physical valuation, or cost of replacement of the physical property of the business.

Whatever their form, industries which exact more than a fair profit on the cost of production are in possession of monopoly advantage. Wherever monopoly power is being exercised, there is an opportunity for a reduction of the cost of living through a reduction of monopoly prices to a cost level.

4. LAND OWNERSHIP

Land ownership is perhaps the greatest single monopoly with which society must grapple. There is no sense of the word in which the private ownership of land is not monopolistic.

Were there enough land to go around, and some to spare, land ownership would be in no sense a monopoly. Other natural gifts like air and sunshine exist in such quantities that every one is always amply supplied with them. Could air or sunlight be monopolized and limited in amount, they would afford a monopoly power as great as that of land. In a community where there are more people who want a piece of land than there are pieces of land to go around, the mere title to a piece of land enables the owner to put a price on it.

He may own a sand bar, near a growing summer resort, or a farm in a section which has been tapped by a railroad line. He need never have seen the land, much less improved it. His mere ownership enables him to fix a price.

The monopoly power of land ownership may be seen in a growing city. Near the commercial center lies a vacant lot. Each year the owner of that lot learns, from the assessor's books, and from the sales of neighboring lots that his land has increased \$100 in value. His taxes and interest are but \$50 a year, so that the rise in value gives him a clear \$50 monopoly profit. One day a storekeeper offers to rent this lot for twenty years and put a store on it. The owner consents, and for the granting of that privilege, he receives \$1,000 a year. From this \$1,000 he deducts interest and taxes. The remainder is monopoly profits.

All returns which come from land, because of its location or because of its natural fertility in soil, minerals, or other resources, are monopoly returns. As such they may be justifiably eliminated.

5. Franchises and Special Grants

A franchise is a right, given by society, to do certain things. The developments of the past few decades have added to this definition the further provision that the owner of the franchise, acting within its provisions, may use the franchise right to exact the highest possible price for the service which he renders.

The monopoly power granted by a franchise is frequently absolute. A company is given the sole right

to lay a railroad along a certain street, or to string wires over or under the street, or to supply gas or electricity to a town. These public utilities are, in their very nature, monopolies. It does not pay to duplicate plants or services. Competition is practi-cally out of the question. There can be but one means of judging the price at which such a monopoly sells its product to the consumers,—that way lies The franchise should through the cost of the service. not be capitalized. It is merely a public grant of a right to do a certain thing. The cost of physical equipment and the actual cost of maintenance alone enters into the problem. When all of the charges, which legitimate business methods lay against the receipts, have been paid, and when a fair profit on the physical valuation has been earned, any additional income should appear in the reduced cost of the product.

The past forty years have witnessed, in the United States, a wonderful awakening to this truth. The last generation, wrapped securely in its confidence that competition was the well-spring of life for all business, was rudely shocked when railroads and great industrial corporations ceased to compete, and began combining in the interest of greater profits. It was no less of a shock to find that all forms of business which were operated under special grants of power were charging not competitive, or fair, or cost prices, but "all that the traffic will bear."

The reaction against franchise monopoly appears in the Interstate Commerce Commission; the State Railroad and Public Utilities Commission; and the guarded form in which new franchises are issued. Neither Federal nor State Commissions will have completed their work until every price paid by the public for the service furnished by public utilities is a fair price, based on the actual cost of producing the service.

6. PATENT MONOPOLY

Patent monopoly requires but a word. If a patent were a grant by means of which an inventor received a return in his invention, there would be some justification for its existence. Theoretically, a patent is such a grant. Practically, it is a means by which capitalists acquire an absolute right to use or to lay by a new device invented by a clever man, and bought over by them. The monopoly power which is inherent in a patent enables the owner of the patent (not the inventor) to charge a monopoly price for his product.

Patent rights there should be, for the inventor. He merits some return for his labor. That fact is undisputed; but to grant to a great industry the right to tax the public for a long series of years, simply because it is sufficiently wealthy to buy up inventions, is as socially disastrous as it is economically ridiculous.

No one, beside the inventor, should receive any monopoly returns on an invention. Where costly experimentation has preceded the final perfection of a new device, the price should be fixed accordingly. Never, in any case, should a patented article be sold for more than its cost of manufacture plus a fair profit to the inventor for his energy and investment. Some inventors will consider this hard doctrine, yet the facts

demand no less. If the exorbitant prices frequently exacted for patented articles brought wealth to the coffers of the inventor, there might be some justification for the patent monopoly, but the vast proportion of profits in patent monopoly are now reaped by the owners of patent rights. When war is declared against monopoly, bought up patent rights will be among the first objects of attack. They are in no sense justified. They add greatly to the prices necessarily paid for things. They convey a monopoly advantage of the most expensive type.

7. THE MONOPOLY OF CREDIT

The pros and cons of the "Money Trust" are still fresh in the public mind. The facts seem to be that the men who controlled the leading financial institutions of the East,—and there were only a few such men,—made loans to those who "stood right" with them. Outsiders were neglected while those inside profited.

The monopoly of credit is inevitable so long as credit is issued by private agencies. Bankers falling in line with other men of affairs have "understandings." They do not propose to compete, because they have seen too much of the disaster that follows in the wake of competition. The remedy against credit monopoly lies not in the decentralization of credit, but in the control of credit issue by the Federal government.

8. INDUSTRIAL MONOPOLY

The statement was made in a previous chapter that the industrial trusts or monopolies had not raised prices materially. It seems to be equally true that these monopolies have not decreased prices in proportion to the decreasing costs of production. Many of the great industries, particularly those which own or control a natural resource, have reaped enormous profits from their monopoly advantage.

Already public opinion has been crystallized regarding industrial monopoly. There seems, for this monopoly, but one remedy,—the appointment of a trade commission, or of trade commissions, with power to determine what constitutes the cost of production, and to fix the maximum price level accordingly. So long as industrial monopoly, complete or partial, is allowed to endure, so long will it be impossible for the consumer to secure the products of such industries at or near their costs of production. The sole remedy seems to lie in price fixing on a cost basis or in absolute ownership by the government.

9. THE MONOPOLY OF PRODUCTIVE TOOLS

One last form of monopoly remains for discussion,—the monopoly of the tools of production. When the artisan used simple hand tools, a monopoly in them was out of the question. Now that the tools of production are social in their nature,—railroads, steamships, factories, and the like,—representing great outlays of capital, it becomes possible to monopolize them, at least in so far as the workers are concerned.

A child born into the family of a cotton weaver finds, when he grows old enough to know such things, that the cotton industry in his section of the country is in the hands of a small group of men,—a few score at most,—who own the factories and by virtue of their ownership are able to exact a monopoly return in the form of interest or profits. The owners of the productive machinery,—usually called stockholders and bondholders,—secure returns for ownership alone. Without exercising any concern or expending any energy or effort, they are enabled, through their titles and deeds, to take a part of the products of the business.

There are primitive communities in which interest is a return for abstinence or risk. The United States has developed far past that point. There are, in the United States, perhaps a hundred billion of capital which will be given by this generation to the generation following. By virtue of the ownership of this capital, those who possess it may tax industry at the rate of five or six per cent. on their holdings. Here is a monopoly advantage of the first order which will exist as long as the private ownership of the tools of production continues.

10. GOVERNMENT ACTIVITY AND THE REDUCTION OF MONOPOLY POWER

There is probably no single way in which the costs of living could be more speedily reduced than through a reduction or elimination of monopoly power. This reduction cannot be made by a return to competition,—a return to competition is out of the question,—but by a regulation of prices in relation to production costs.

The individual is powerless to effect monopoly, hence the elimination of monopoly profit is wholly a

matter for social action. Only through public utilities commissions; railroad commissions; trade commissions; government banking; readjusted patent legislation; and the exercise of a large measure of control over the productive machinery itself can relief be expected.

These suggestions are not new. Many of them are now in the making. Public utilities and railroad commissions have been organized in most industrial states; the Federal Trade Commission proposed by the Democratic Administration, as well as the proposed Federal ownership of telephone lines is a step in the same direction. There are more steps to be taken,—many more steps, in fact,—before the monopoly power which is now exercised in the fixing of prices has been eliminated. Meanwhile the people are understanding more clearly with each passing day that their popular rights can never be safeguarded so long as monopoly is lodged in private hands.

XXV

READJUSTED TAXATION

TAXATION is a means, ready at hand, whereby the people, acting through the government, may enforce their will against monopoly.

Monopoly power can be reduced most effectively through taxation. There is, indeed, no other means, save direct confiscation or direct purchase, by which the power of monopoly can be promptly effected.

1. Unearned Increment

The most apparent object of taxation is the social value represented by the unearned increment in land. If there is unearned increment or unearned returns anywhere, it is the return from increasing land values. Timber lands, farm lands and city lands alike report immense increases in values. The increase in the timber land value is due in part to the growth of the timber, but largely to the increase in demand. Increased farm land value and city land value is due solely to the increasing demand for land.

As population grows, as commerce develops, and business becomes more highly organized, land values increase because of the increasing demand for land. This increase due to the presence and activity of society,—this increment, unearned by the holder of the land,—is the source of the constant rise in land values. As

generation follows generation land values will continue to rise in the United States until a point of maximum return is reached, or until society takes the increase through land taxation. With such taxation, any increase in demand would be at once converted into increased taxes.

Land ownership is the greatest single monopoly in the United States. Land taxation is the most pressing of all reforms for the reduction of monopoly power.

Every progressive, who sees social progress in increasing prosperity and in more advanced forms of social justice, is brought face to face with the land problem. The land was not made by any individual. but was here, when the human race appeared. fertility that lies in the land,—the plant food, coal, iron, copper and water power, -are the result, not of individual effort, but of natural processes. The desirable location of certain pieces of land, in proximity to commercial centers, is the result of the presence and growth of society. An individual may justly lay claim to the products of his own hands. Whatever he receives, in addition to that amount, he receives from nature's bounty, or from society's activity and To neither natural fertility nor to social values has the individual any justifiable claim. land belongs to any one, it belongs to the group. land values belong to any one, they belong to the group which created them. The case seems clear. Land values are social values, and as such should be absorbed by land taxation.

The converse of the proposition is also true. Men should receive a return for effort expended. There-

fore they are entitled to the products of the activity on the land, or the use of the land. Land values are social. Improvement values are individual values.

2. TAXING LAND VALUES

The city which aims to reduce monopoly profits from land ownership must begin by making a separate assessment of land and of buildings and other improvements on land. The improvements should be exempt from taxation. The land alone should be taxed. By this means, the product of men's efforts goes free. Taxes are levied upon the land, in the making of which man played no part.

Incidentally, the removal of a tax on improvements and the imposition of a tax on land alone should result in a material increase in improvements. Taxation always discourages the production of the thing taxed. Land cannot be discouraged.

The tax, levied on city land, should be placed at a figure that will discount all present or future land values. The object of the tax is to prevent the holder of land from receiving any benefit from land holding. For improving land, a man is justly entitled to the total value of his improvement. For merely holding land, he should receive no recompense. The tax should be readjusted to meet the increasing demand for a given piece of land. As demand increases, the tax should also increase.

A municipal land tax, placed so high as to prevent an individual from securing returns from his land ownership, affords perhaps the most convenient means for regulating rent, an item for which the ordinary city family spends from one-sixth to one-fourth of its income. Land taxes, making landlordism unprofitable, will eliminate those land values which now result from speculation, at the same time that they convert, for public uses, the values, resulting from a legitimate demand for land.

The land tax problem of the state is a horse of another color. For the most part, the land outside of cities and their immediate environs is valuable because of its fertility, rather than because of its location. Nature has endowed the ground with value for farming, lumbering, or mining. The sum-total of these natural endowments should be taxed at their full value.

The valuation of state land is no easy work. The values of mineral lands are particularly difficult of estimate. Timber land values and farm land values may be determined. Whatever the difficulty of assessment, the object remains the same as in city land,—the elimination of monopoly profits.

3. INCOME AND INHERITANCE TAXES

The income and inheritance tax have both been adopted as a means of taking, for the use of the state, a portion of the wealth accumulated by the individuals who pay the tax. In neither case is there any assurance that the tax is directed against monopoly profits.

The income tax is peculiarly ineffective. One man has in his possession property holdings which give him a return of \$10,000 a year. Another man, in professional life, earns \$10,000 a year as an attorney or surgeon. The same income tax is ordinarily imposed

on both men. The income tax therefore operates against income as income, without any regard to the source from which it is derived.

Inheritance taxes are directed against inheritance in any form. However, they serve a purpose essentially different from that served by the income tax.

Upon the death of an individual, property passes, under the law, either in accordance with the provisions of the will, or else in accordance with certain well recognized legal formulas. In either case, it gives to the beneficiaries property titles which enable them to exact a return from society. There is an essential difference between the situation of the man who gains property by his own exertions, and the man who has property handed to him by another. The latter man really secures, without effort on his part, a power to tax the community.

Whenever inheritance is discussed, the most robust man in the company always raises a plea for widows and orphans. Certainly they should be considered. Ample provisions should unquestionably be made, out of an estate, for the comfort of the widow during her life, and for the education of the orphans. That has nothing at all to do with the general proposition of inheritance, nor is it in any sense an argument against the operation of a high, progressive inheritance tax.

4. THE FIELD OF TAXATION

The object of taxation is twofold. First, the tax must provide sufficient revenue for the maintenance of the state. Second, the tax should be used to reduce or eliminate monopoly profits. Wherever the latter

object is well served in a highly organized society, the former is amply provided for. Taxation should be directed against monopoly profits. In so far as that is practicable, the products of effort and industry should go untaxed. Always, however, the function of taxation as a means of social regulation and equalization should remain paramount.

XXVI

THE OUTLOOK

1. THE BURDEN ON STATESMANSHIP

THE cost of living problem involves an issue of great magnitude, reaching, as it does, to the foundation of many economic and social questions. Many steps lie between the present and a material reduction in living costs.

Nevertheless, society must find a solution for the increasing cost of living. The issue will not adjust itself; neither will it lie in abeyance until society is prepared to meet it and master it. From millions of households it is now crying aloud for remedy. The people demand relief from a burden which is growing yearly more intolerable, and a point has been reached at which these demands can no longer be ignored. Statesmanship and science must unite their forces in an effort to raise this burden from the backs of those who are so little able to bear it.

When the present Democratic administration proposed to reduce the cost of living, it assumed a grave burden of responsibility. Many people believed, and many still believe, that the administration will justify the public confidence in its ability to reduce living costs.

The directing forces in the administration are apparently anxious to fulfil their pledges. More than a

year has passed and prices are no lower now than they were when the Democrats took office. Thus far, however, the work of the administration has been headed in the right direction. The tariff has been reduced; the banking of the country has been reformed, and the trusts more stringently curbed. The parcels post has been extended; the government railroad in Alaska has become a possibility; and the way has been paved for the public control of the telegraph and telephone service. These steps are beginnings; but they must be followed by other steps, and by longer steps, if the administration is to solve the cost of living problem.

2. A LINE-UP OF THE ISSUES

Some idea of the distance which has already been covered, and of that which must be covered before anything like a solution of the issues at stake is possible, may be gained from a succinct summary of the causes of rising living costs, together with a statement of the specific ways in which the cost of living may be reduced.

THE HIGH COST OF LIVING

Causes

- 1. The change from rural to city life.
- 2. Rising standards of life.
- 3. The desire for accumulation
- of property.
 4. The scarcity of the meat supply.

Remedies

- (a) Increased city efficiency.
 (b) The simple life.
- 2. Education for wise buying and wise use.
- 3. A saner view of life.
- 4. (a) More intelligent farming.
 (b) A decrease in the proportion of meat in the diet.

THE HIGH COST OF LIVING (Continued)

Remedies Causes 5. The exhaustion of resources. 5. (a) Conservation.

- 6. The increasing gold supply.
- 7. The increasing cost of raw materials.
- 8. The increase in land values.
- The increase in labor costs.

- (b) Substitution of new re-
- 6. (a) The use of flat money, or (b) An international regulation of the gold supply, and (c) Federal control over the
 - issue of credit.
- 7. They occur chiefly in connection with the increase in land values (see 8).
- 8. (a) A land tax to absorb the full economic value of the (b) Land nationalization.
- 9. Increase in the efficiency of labor.

ADDITIONAL MEANS FOR REDUCING THE COST OF LIVING

- The elimination of private monopoly in all of its 1. forms.
- A system of taxation that will take all unearned values for social uses.
- An increase in the service rendered to the citizen by the government.

A comparison of this list of necessary remedies with the Democratic program will give some idea of the distance which statesmanship must travel before it has exhausted the full possibilities of the cost of living problem. He who is sincere in his desire to reduce the cost of living must be fully aware of the fact, becoming daily more patent, that the solution for this, as for many of the other problems of value and distribution, lies, not in any superficial remedy, but in a radical readjustment of some of the most fundamental economic and social relations. No tabulation can give an adequate idea of the true nature of the questions at issue; but if this study has done anything, it has shown that they are manifold.

3. THE CLEARING SOCIAL VISION

The clouds of doubt and of uncertainty are clearing away little by little. Men and women are learning to see in this, and in many of the other industrial problems which society is facing, an issue that society must meet and master in the very near future.

A hundred years ago the Western World told itself that it might safely rely upon individual initiative for the supplying of its wants. Individualism was unanimously elected. Has its administration proved a success? Certain individuals feel that it has, but the great masses of mankind are questioning its results. To be sure individualism is satisfactory to the successful individual; but does it give to men and women in the mass those good things of life which they were led to believe would be forthcoming if the individualistic system of industry were given a fair trial?

Individualism has probably proved of great advantage as a stimulus to endeavor during the formative period in the development of natural resources. Do the same forces which promised so richly at the dawn of America's history still commend themselves to the thoughtful citizen? He gazes upon an ordered, organized, socialized economic world, wondering, meanwhile, where lies the justification for those inequalities and those hardships which fall to the lot of so many.

The nineteenth century was a century of rapid de-

velopment, of deep-seated transformations. Society organized and unified itself. Families moved together into cities and towns. The nineteenth century was the century of American adolescence. At its close, men looked back, proud of their achievement. They looked forward, uncertain which way to go. The things of the nation's childhood must now be put away. What were the childish things? Who was there wise enough and strong enough to convince the people that certain ideas and practices belonged to early youth, and must be left behind with the passing of youthful years?

Perhaps the most significant of all of the changes which the nineteenth century had wrought was the reconstruction of popular ideas regarding the function of government. The change from village to city life, and from individualistic agriculture to coöperative industry underlay the change of thought. It was upon this basis that the new ideas were built.

4. THE FIELD OF SOCIAL SERVICE

The eighteenth century had been taught to believe that "government" and "despotism" were synonymons terms. "Back to nature," said Roussean. "That government governs best which governs least," insisted Jefferson. Thus men sought to escape from the tyranny of authority.

The nineteenth century has convinced Americans that there are things innumerable which the government can do far more effectively than the individual. Indeed, there is a great category of activities which must of necessity be government activities. The

policing and lighting of cities; the organization and direction of popular education; the planning of cities and towns; the safeguarding of health through an inspection of food and drink,—these, and innumerable other services cannot be performed by the individual city dweller. For them he must rely upon the organized government. The patency of these facts has convinced men that while government and despotism may have been synonymous terms in 1776, they are not necessarily synonymous to-day, since many of the services upon which life now depends are performed by the government in an entirely non-despotic fashion.

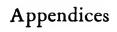
Another transformation of view-point has followed the specialization of industrial districts and the interstate commerce and commercial relations which inevitably result from such specialization. The people of the United States began the nineteenth century firmly convinced of the efficacy of the State's Rights principle. They began the twentieth century with a dawning consciousness of Federal unity. The State's Rights doctrine was rapidly giving place to the spirit of nationalism. Coöperative industry, highly developed means of communication, and the commercial interdependence of all parts of the union made state lines seem insignificant or useless, at the same time that they exalted broader ideals.

The path of national thought seems quite plain. "We desire good service and fair prices," the people insist. "Will individualism yield them? If it will not, then perhaps coöperative social service will yield them."

Men have ceased to fear the government. They

look upon the state as a servant rather than a master. Is the state better able than private initiative to supply certain social needs? If the answer is affirmative, there is no question but that the state will be given a chance to demonstrate its efficacy.

Can private industry furnish the goods and services which the world requires at a reasonable price? If its profession and practice are affirmative, it will continue unchallenged. The developments of the past half century would seem to lay the whole subject open for controversy. Industrial opportunity has narrowed to an astounding degree; the wealth of a few is unthinkably great, while the misery of the lower strata of society is unquestionable and unquestioned; and now, in these latter years, prices rise steadily, without any corresponding increase in many an income. individualism proved a success? Has it served society in the best possible way in which society might be served? Would cooperative social activity be of more social service? The real test is the test of service. Unless the system of individualism which the nineteenth century evolved can pass the acid test of service, or if there is any other means by which more effective service can be rendered, then, inevitably, the old system must give place. On every side there is a growing belief that neither the cost of living nor any other of the pressing economic problems can be solved until social activity is substituted for individual initiative in the rendering of social service. In so far as the cost of living is concerned, this social service will begin with an organized effort to eliminate monopoly profits of every kind, to conserve and administer natural resources for the benefit of society rather than of any individual, and to raise the standard of efficiency both in the production and the distribution of wealth.





Appendix A

STATISTICS OF THE PRODUCTION OF NECESSARIES AND LUXURIES 1

(a) STATISTICS OF CERTAIN INDUSTRIES WHICH PRODUCE GOODS ORDINABILY CLASSED AS COMFORTS AND LUXURIES, 1909

	Persons Engaged	Capital	Value of Products	Value Added by Manufacturing
Artificial Flowers, Feathers and Plumes		\$9,693,000	\$23,981,000	\$10,354,000
Billiard Tables and Materials		4,705,000	5,878,000	2,509,000
Cigar Boxes		5,403,000	8,491,000	4,178,000
Confectionery		68,326,000	134,796,000	53,645,000
Jewelry		63,811,000	80,350,000	43,675,000
Liquors		771,516,000	592, 550,000	453,351,000
Pianos. Organs and Materials	41,882	103,234,000	89,790,000	46,025,000
Phonographs and Graphophones		14,363,000	11,726,000	8,627,000
Moving Pictures		19,428,000	4,206,000	2,014,000
Tobacco Pipes		3,528,000	5,312,000	2,853,000
Soda Water Apparatus		8,589,000	6,556,000	4,110,000
Sporting and Athletic Goods		6,617,000	11,052,000	5,487,000
Statuary and Art Goods		2,221,000	3,442,000	2,762,000
Tobacco Manufacturing		245,660,000	416,695,000	239, 509, 000
Tovs and Games		6,541,000	8,264,000	4,710,000
Automobiles		173,837,000	249, 202, 000	117,556,000
Clocks and Watches	439	57,500,000	35,197,000	24,066,000
Bilk and Silk Goods	_	152,158,000	196,912,000	89,145,000

1 Abstract of the Thirteenth Census, 1910, pp. 514 ff.

(b) Statistics of Certain Industries which Produce Goods Ordinarily Classed as Necessaries, 1909

Chassed as inecessaries, 1003	TA ECESSE	nina, rona		
	Persons Engaged	Capital	Value of Products	Value Added by Manufacturing
Boots and Shoes	215,923	\$222,324,000	\$512,788,000	\$180,060,000
Boots and Shoes (Rubbers)	18,899	43,905,000	49,721,000	
Bread and Rakery Products	144,322	212,910,000	396,865,000	
Butter, Cheese and Condensed Milk	31,506	71,284,000	274,558,000	
Buttons	18,004	15,640,000	22,708,000	
Canning and Preserving	71,972	119,207,000	157,101,000	_
Carpets and Rugs	34,706	75,627,000	71,188,000	
Chocolate and Coooa	3,404	13,685,000	22,390,000	
Clothing, Men's	271,437	275,320,000	568,077,000	
Clothing, Women's	179,021	129,301,000	384,752,000	
Coffee and Spices	13,516	46,042,000	110,533,000	
Cotton Goods	387,771	822,238,000	628,392,000	
Dyeing and Finishing	47,303	114,093,000	83,556,000	
Flour and Gristmills	66,054	349,152,000	883,584,000	
Food Preparations	20,965	64,685,000	125,331,000	
Fur Goods	16,152	29,249,000	55,938,000	
Men's Furnishings	43,935	49,009,000	87,710,000	
Furniture and Refrigerators	144,140	227,134,000	239,886,000	
Gloves and Mittens	12,950	16,909,000	23,631,000	
Hats and Caps	47,022	58,730,000	91,214,000	
Hosiery and Rnit Goods	136,130	163,641,000	200,143,000	
House Furnishing Goods	5,916	12,784,000	18,509,000	
Leather Goods	43,525	69,814,000	104,719,000	

14,109 23,735,000
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Appendix B

CHANGES IN FOOD PRICES!

(a) Relative Retail Prices of Food for 1890 to 1913 [Average price for 1890-1899=100.0]

Fear or	Simpl fifte geog	e avera en prin graphic	Simple average of the relative prices of fifteen principal articles of food in each geographical division	he relat ticles of on	live pri food i	ices of n each	Relat ave cles each	Relative prices weighted according to the average consumption of the various articles of food in workingmen's families in each geographical division	es weig asumpti in wor uphical	hted acion of the kingme	cording ne vario n's fan	to the us arti- illies in
	North At- lantic	South At- lantic	North Cen- tral	South Cen- tral	West-	United States	North At-	South At- lantic	North Cen- tral	South Cen- tral	West- ern	United States
1890	101.7	100.4	102.0	100.6	106.0	102.0	101.9	100.6	101.7	100.9	105.2	101.9
1892	102.7	101.8	104.5	103.2	107.6	103.6	102.1	101.6	104,4	102.8	106.9	103.4
1893	104.8	102.5	106.4	104.2	103.0	104.6	104.4	102.7	106.2	104.2	102.1	104.1
1894	99.4	99.5	100.0	100.3	98.1	99.5	99.2	9.66	9.66	100.4	98.0	99.3
1895	97.2	98.5	97.0	8.76	96.0	97.2	97.2	87.8	97.1	97.9	92.6	97.1
1896	95.7	97.1	93.9	95.4	94.1	94.9	95,9	97.3	94.0	95.7	94.3	95.2
1897	97.3	97.3	82.8	9.96	94.6	96.4	97.4	97.4	96.1	6.96	94.9	96.7
1898	100.3	99.7	99.3	100.4	2.96	99.4	100.2	99.7	99.5	6.66	98.0	99.7
1899	99.7	102.3	99.4	101.8	100,3	100.6	100.0	102.0	9.66	101.3	101.8	100.8

103.0 108.5 114.6 114.7 116.2	116.4 120.3 125.9 130.1 137.2	144.1 143.0 154.2 163.4	153.5 150.9 147.6	152.7 154.6 154.1	151.8 153.8 156.2	158.4 159.3 158.1
102.2 104.9 110.1 109.9 111.1	111.8 115.0 121.8 123.9 131.3	138.8 139.1 145.9 158.1	144.1 141.8 142.7	144.3 143.6 143.7	144.3 144.5 148.0	150.0 151.7 151.7
103.1 109.7 118.7 120.3 121.1	121.3 125.0 130.9 137.5 147.1	156.7 157.0 165.3 175.2	166.2 161.4 158.9	164.7 166.3 165.2	161.6 163.6 167.3	169.6 170.0 169.2
102.5 109.5 115.4 115.5 116.2	116.3 120.6 126.0 131.5 139.1	147.0 144.4 157.6 167.8	156.5 153.5 151.0	158.0 159.2 158.7	154.6 157.4 160.0	162.6 161.1 158.4
104.4 109.7 115.6 114.6	115.7 120.0 125.9 129.8 137.8	148.4 142.9 153.3 161.1	153.1 150.5 145.1	149.9 154.3 153.4	150.4 152.4 156.1	157.9 158.5 157.7
103.0 108.0 114.0 113.7 115.5	115.0 119.1 123.9 126.5 131.2	135.2 134.9 148.7 156.2	147.6 146.9 140.7	145.5 148.2 148.0	147.3 149.9 150.1	152.3 154.5 153.3
102.9 109.5 116.9 118.3	118.3 122.4 128.0 132.5 140.3	148.5 146.9 157.9 167.0	153.7 152.1 150.4	156.0 158.6 158.1	156.2 157.8 159.9	161.8 161.7 159.6
100.7 104.6 111.9 112.4 114.8	115.4 118.9 125.5 128.4 137.4	146.3 145.9 151.0 164.6	147.0 144.6 147.0	150.4 151.0 150.6	150.8 150.2 153.3	155.3 156.4 155.3
102.2 110.5 119.3 121.4 122.2	122.4 125.8 131.7 138.8 148.3	157.8 158.6 166.9 176.6	166.7 162.5 160.8	166.7 168.6 168.1	164.0 165.9 169.3	171.2 170.7 169.3
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104.7 110.3 116.7 115.6 115.8	116.3 120.8 126.4 131.0 139.2	149.8 145.2 155.4 163.2	152.9 151.3 147.4	153.1 158.0 157.6	153.8 155.5 158.5	159.9 159.3 157.6
103.0 108.9 116.2 116.3 117.6	116.8 121.4 126.4 129.2 134.7	140.3 139.3 151.4 160.0	147.9 147.4 143.5	148.8 151.9 150.7	151.1 153.3 153.8	155.8 156.7 154.7
1900	1905 1906 1907 1908 1909	1910 1911	January . February . March .	April May June	July August September	October . November December

(a) RELATIVE RETAIL PRICES OF FOOD FOR 1890 TO 1913-Continued

Year or	Simp	Simple average of the relative prices of fifteen principal articles of food in each geographical division	ge of t scipal a	the rela	tive pri	n each	Relati aver cles each	Relative prices weighted according to the average consumption of the various articles of food in workingmen's families in each geographical division	ss weigh sumpti in wor	hted ac on of th kingme division	cording n's fam	to the us arti- ilies in
	North At-	North South North South At- At- Cen- Cen- lantic lantic tral tral	North Cen- tral	South Cen- tral	West- ern	West- United ern States	North At- lantic	North South North South At- At- Cen- Cen- lantic lantic tral tral	North Cen- tral	South Cen- tral	West-	United States
1913												
January	153.6	157.3	160.4	169.1	154.3	159.5	151.9	156.9	159 9	168.8	151.1	167.9
February.	152.2		160.2		151.6			154.4	159.4	166.2	148.0	155.8
March	153.3		163.3		151.0			155.2	162.2	167.5	147.8	156.7
April	156.1	160.3	165.9	171.8	151.6		152.8	159.0	164.2		146.2	158.9
May	156.1	158.6	164.6	171.7	152.8		151.1	156.3	161.2		146.3	157.2
June	158.8	162.0	165.9	173.9	155.5		153.4	158.8	162.2		148.7	159.2
July	162.6		167.5	175.7	161.1			160.0	169.4		154.0	163.6
August	164.5	166.3	174.5	178.9	164.7	171.3	159.0	163.2	170.7	177.3	158.1	166.1
September .	165.5		178.8	183.4	167.2			167.3	176.4		161.4	170.1
October	165.7		178.0		168.7	174.6		166.7	176.2		162.4	170.9
November .	167.2	170.0	178.1	187.0	169.5	175.4	164.7	168.0	177.0	185.2	162.8	172.8
December .	164.2		176.3	187.5	169.3	173.9		167.7	175.4		162.9	171.7

¹ Bulletin 140, United States Department of Labor,—Retail Prices, 1890 to 1913, Washington, Government Printing Office, 1914, p. 11.

(b) Cost of Living in New Jersex—Comparison of Average Retail Prices, Month of June, for 1898 and 1913 1

Articles	Basis of Quantities	Average Retail Prices 1898 1913	Retail ces 1913	Percentage of Increase or Decrease
Flour. wheat, first quality	Barrel	\$5.154	\$6.530	
Flour. wheat, second quality	Barrel	4.370	5.778	32,22
Oatmeal, loose	Pound	.044	.044	
Oatmeal, package	Pound (2 lbs.)	.106	101	
Sugar, granulated	Pound	.059	.052	
Molasses, N. O.	Gallon	.479	.601	25.47
Svrup	Gallon	.401	.471	
Butter, first quality	Pound	219	.364	
Butter, second quality	Pound	.169	.317	
	Pound	160.	.153	
Cheese, best	Pound	.141	.215	
Cheese, medium	Pound	.110	.172	
Coffee, Rio	Pound	190	.247	
Coffee, Java	Pound	.320	.339	
Coffee, Maracaibo	Pound	.250	288	
Tea. black, first quality	Pound	.641	809	
green.	Pound	.627	009	
	Pound	.587	.566	
roast	Pound	.156	.216	
roast	Pound	.118	181	53.39
Stoak	Ponnd	187	277	

¹ Thirty-sixth Annual Report, Bureau of Statistics of New Jersey, Trenton News Printing Co., State Printers, 1914, p. 164.

(b) Cost of Living in New Jersey—Comparison of Average Retail Prices, Month of June, for 1898 and 1913—Continued

Articles	Basis of Quantities	Average Retail Prices 1898 1913	Retail ces 1913	Percentage of Increase or Decrease
Beef, steak, round	Pound	.152	.243	59.87
corned,	Pound	.120	204	70,00
Beef, corned, brisket	Pound	220.	.130	73.33
Beef, smoked	Pound	.249	.349	40.16
Pork, fresh	Pound	.112	205	80.36
Pork, salt	Pound	.095	177	86,31
Bacon	Pound	.121	.250	106.61
Ham	Pound	.119	.220	84.87
Shoulder	Pound	.084	.160	90,48
Mutton, leg	Pound	.145	.199	37.24
134	Pound	.094	.120	27.66
, salt,	Pound	.154	.176	14.28
Mackerel, salt, No. 2	Pound	.128	.135	5.47
Tomatoes	Can	.109	.103	5.50
Corn	Can	101.	.108	6.93
Succotash	Can	.116	.119	2.69
Rice	Pound	083	680.	8.54
Prunes, first quality	Pound	.102	.125	22,55
Prunes, second quality	Pound	980.	.095	10.46
Raisins, seeded	Pound	.095	.095	:
Soap, common	Cake	.043	.048	11.63
Kerosene oil	Gallon	.100	.118	18.00
Totals		\$16.901	\$21.585	27.71

Appendix C

THE MOVEMENT OF FOOD PRICES AND OF EARNINGS IN NEW JERSEY, 1898-1912 1

OF the entire list of fifty articles, thirty-eight show increases, and twelve decreases of prices in 1912, compared with 1911. greatest increase is in the price of "old potatoes," which, in 1911, averaged \$0,898 per bushel, and in 1912, \$1,387 per bushel, an advance of \$0.489, or more than 54 per cent. This increase was offset to some extent by a reduction of \$0,263 in the price of "new potatoes." Flour per 25 lb, bag, first and second qualities, shows an advance of \$0.068 and \$0.063 respectively. The various cuts of beef show increases ranging between two and three cents per pound, and pork, mutton and lamb, show smaller increases. The average prices of meats are not as high as they are said to be in offhand discussions of the increase in the cost of living. The prices quoted for "sirloin steak" averages 25,5 cents, "round steak," 22 cents, and "rib roast," 20.7 cents per pound, and "bacon" shows an actual reduction of six-tenths of a cent per pound below the average for 1911. The net increase in average prices is, as pointed out in the review of Table No. 1, \$0,917, or 6.6 per cent. In 1911, the average yearly earnings of the approximately 350,000 operatives, including men, women and young persons of both sexes employed in manufacturing industry throughout the state, skilled and unskilled, was \$531.94. In 1912, the average earnings were \$544.30, an increase of \$12.36, or 2.3 per cent. So far as food supplies are concerned, therefore, the earnings of factory and workshop employees show a net falling off in purchasing power of 4.4 per cent. in 1911, as compared with 1910.

In 1898, the list of forty-three articles showed a total cost of \$16.901; in 1912, the price at which the same goods may be pur-

¹Thirty-fifth Annual Report of the Bureau of Statistics of Labor and Industries of New Jersey; Sinnickson Chew & Sons Company, 1913, pp. 152-154.

chased is, as shown by the table, \$22.708; the increase that has taken place during the past fourteen years in the bill of goods is therefore \$5.807, or 34.36 per cent.; which is an average of 2.45 per cent. for each of these years. Of the forty-three articles included in the comparison only five show slight decreases in 1912 as compared with 1898; these are: Oatmeal in package, Java coffee, and the three varieties of tea—black, green and mixed. All others show increases. Flour, first quality, shows an increase of 41.15 per cent.; second quality, 46.67 per cent.; butter per pound, 81.06 per cent. The highest percentages of increase are shown by the several varieties and cuts of meat—beef, pork and mutton. The advance in bacon is 74.38 per cent.; fresh pork, 67.86 per cent.; ham, 53.78 per cent.; beef—corned brisket, 60.00 per cent.; corned round, 49.17 per cent.; sirloin steaks and round steaks, 36.36 and 44.74 per cent. respectively, and ribs of roast beef, 32.69 per cent.

Of the thirty-eight articles showing an increase, eight have advances less than ten per cent.; six show increases of over ten, but under twenty per cent.; five show increases ranging from twenty to forty per cent.; six show increases of over forty, but under sixty per cent.; and thirteen are in the class showing advances ranging upward from sixty to the highest—eighty-one per cent.

It would be impossible to make a reasonably accurate estimate of just what the percentage of increase has been in the outlay per family for food supplies, from any deductions drawn from the figures shown by the table. The entire bill of goods is, it is true, 34.36 per cent. higher than it could have been purchased for four-teen years ago, but it should be borne in mind that the abnormally great increase in the prices of a comparatively small number of articles contained in the bill is responsible for producing the high average increase shown by the table. A definite knowledge of how far the increase of prices has affected incomes can be arrived at only by ascertaining to what extent families have turned to the use of the lower priced cuts of meat and other varieties of foods as substitutes for those showing the greatest increases.

With regard to how far wages or earnings have responded to the upward movement of prices, we find that as shown by the "Statistics of Manufactures of New Jersey," the average yearly earnings of all classes of labor, skilled and unskilled, men, women and minors, employed in the factories and workshops of New Jersey

in 1910, was, as stated above, \$531.94; in 1911, the average for these same employees as shown by the same authority is \$544.30; the increase for the year is, therefore, nearly 2.3 per cent., while the increase in the bill of food supplies for the same time is 6.6 per cent., which leaves the purchasing power of incomes, earnings and wages, in factory and workshop industries, just 4.3 per cent. lower than it was in 1910.

Since 1898, a period of fourteen years, the average annual earnings of factory and workshop employees in New Jersey have advanced 24.5 per cent., which falls 9.8 per cent. short of offsetting the increase in prices.

Appendix D

VARIATION IN THE COST OF LIVING FOR SIXTY-SIX NEW JERSEY TOWNS, 1912

County	City or Town	Total Retail Prices of a List of Fifty Articles 1
Hunterdon	Califon	\$10.915
Hunterdon	Glen Gardner	12.579
Monmouth	Allenwood	12,953
Hudson		12,997
Morris		13,035
Warren	Phillipsburg	13.050
Monmouth	Marlboro	13,260
Morris	Middle Valley	13,324
Monmouth	Freehold	13.535
Burlington	Burlington	13.740
Hudson	Hoboken	13,783
Hudson	Harrison	13.942
Meroer	Trenton	13,955
Cumberland	Millville	13.985
Atlantic	Mays Landing	14.017
Monmouth	Matawan	14.022
Hunterdon	High Bridge	14.150
Bergen	Garfield	14.172
Warren	Marksboro	14.270
Monmouth	Allentown	14.289
Sussex	Stillwater	14.351
Sussex	Monroe	14,351
Gloucester	Clayton	14,367
Somerset	Somerville	14,462
Morris	Dover	14,560
Hunterdon	New Germantown	14,561
Essex	Newark	14.570
Essex	Newark	14.634
Monmouth	Asbury Park	14,650
Warren	Oxford	14.673

Forty-eight articles of food; soap; and kerosene oil.

Variation in the Cost of Living for Sixty-Six New Jersey Towns, 1912—Continued

County	City or Town	Total Retail Prices of a List of Fifty Articles
Ocean		\$14.727
Ocean	Lakehurst	14,474
Middlesex	Cheesequake Belvidere	14.758
Warren	Belvidere	14.798
Morris	Chester	14.810
Warren	Blairstown	14,830
Middlesex	Metuchen	14.851
Warren	Port Colden	14.854
Sussex	Newton	14.873
Atlantio	Hammonton	14.878
Hunterdon	Flemington	4 14.897
Union		14.900
Cumberland	Bridgeton	14.900
Morris		14.97
Essex	Belleville	14.980
Burlington	Mt. Holly	15,000
Warren		15.019
Gloncester		15.02
Essex	Orange	15.17
Salem	Salem	15.220
Sussex	Swartswood	15.25
Cape May	Cape May	15.27
Morris	Boonton	15.45
Warren	Hackettstown	15.47
Warren	Washington	15.550
Ocean	Manahawkin	15.62
Passaic		15.668
Middlesex		15.73
Burlington		15.82
Passaio		15.880
Middlesex		15.919
Camden	~ -	15.998
Bergen		16.089
Mercer		16.147
	South Orange Rutherford	

An examination of the table will show that, generally speaking, prices are lowest in the smaller country towns and highest in the most select residential communities. This can be explained in great part, if not entirely by the difference in store rent, salaries of clerks, store fittings, delivery, and other expenses incidental to store management, which are, as a matter of course always very much greater in the large cities and towns. In these places dealers handle groceries alone, while in the country store all kinds of goods are usually sold in addition to food supplies, and there is therefore a much wider range of merchandise from which the profits of the business may be drawn.¹

^o Thirty-fifth Annual Report of the Bureau of Statistics of Labor and Industries of New Jersey, Camden: Sinnickson Chew & Sons Company, 1913, p. 151.

Appendix E

PER CENT. OF TOTAL FOOD EXPENDITURES FOR VARIOUS KINDS OF FOOD-BY INCOME 1

Total Expenditure for Food	\$274.72 308.95 336.98 376.02 413.09
Alcohol Per Cent.	6.5 6.7 6.0 7.2
Sugar, etc. Per Cent.	8.8.8.8.8 0.8.70
Vegeta- bles and Fruits Per Cent.	13.8 13.9 13.2 14.4 14.2
Cereals Per Cent.	21.0 19.9 18.9 17.7 17.3
Eggs, Milk, etc. Per Cent.	21.6 19.8 20.2 23.3 21.1
Meats and Fish Per Cent.	29.4 31.4 31.6 30.8 32.1
Number of Families	77 78 73 83 31
Income of Family	\$600 to \$699 700 to 799 800 to 899 900 to 999 1,000 to 1,100

1 "The Standard of Living in New York City," R. C. Chapin, New York: Charities Publication Co., 1909, p. 140.

Appendix F

ITEMIZED COST OF PRODUCTION FOR PAPER PULP AND NEWS-PRINT PAPER

(a) ITEMIZED COST OF PRODUCTION PER TON OF SULPHITE PULP, BY YEARS, 1901-1909

Items	robr	2061	E061	1904	5061	2001	2061	806r	6061
Sulphur	\$3.24	\$3.24	\$3.32	\$3.15	\$2.97	\$2.87	\$2.81	\$2.74	\$3.01
Limestone		• !					•	20:	11.
Lime	.73	.65	69.	• 64	.63	76.			.46
poo _M	12.74	13.50	14.02	15.51	16.18	17.03	17.75	21.42	22.27
Total	\$16.71	\$17.40	\$18.02	\$19.30	\$19.79	\$20.47	\$21.12	\$16.71 \$17.40 \$18.02 \$19.30 \$19.79 \$20.47 \$21.12 \$24.72	\$25.90
CONVERSION:									
actur	\$3.90	\$3.96	\$4.26	\$4.38	\$4.20	\$4.19	\$4.59	\$4.28	\$3.60
Felts	.16		.18	.14	.16		.18	.13	60.
Wires	:		•	.04	.04		.05	70.	9.
Screen plates	.16	Ξ.	89.	80.	80.		.13	90:	8
Belting	.18	.15	.15	.14	.12		.13	.13	.13
Lubricants	90:	.0	.05	90:	.05		90.	.05	9.
Repair materials	1.45	1.27	1.11	1.35	1,34		1.57	1,03	1.34
Repair labor	89.	.56	.55	.61	.59		99.	£.	89

ernment	gton, Gov	Washing	Session,	gress, 151	62d Cor	No. 31,	ocument	Senate L	1 Pulp and News-print Paper Industry, Senate Document No. 31, 6ad Congress, 1st Session, Washington, Government
\$35.02	. \$25.72 \$26.08 \$27.08 \$28.69 \$29.14 \$29.97 \$31.32 \$32.52 \$35.02	\$31.32	\$29.97	\$29.14	\$28.69	\$27.08	\$26.08	\$25.72	Total Manufacturing Cost
\$34.68	\$34.06 .46	\$31.08 .24	\$29.72 .25	\$28.87	\$28.67 .02	\$27.07 .01	\$26.07	\$25.71 .01	Direct cost
\$8.77	\$9.33	\$9.97	\$9.26	\$9.09	\$9.37	\$9.05	\$8.67	\$9.00	Total
12.02	.15	80.	.10	12.03	.09 .01	8.8	.08	.10	Office
17.	18		.15	.17	38	.15	.00	.13	Miscellaneous operating expenses
2.29	2.47		2.24	2.16	2.22	2.42	2.18 2.23	2.18	Fuel, coal

Printing Office, 1911, pp. 77.

(b) Itemized Cost of Production per Ton of News-print Paper, by Years, 1 From 1900 to 1909. Inclusive

	FR	FROM 1900 TO 1809, INCLUSIVE	TO TA	S, INC.	COSIVE					
Items	oobs	robr	1902	2003	1904	2061	9061	Lobr	sobr	bobs
MATERIAL: Ground wood. Sulphite. Wrappers Fillers. Alum Bleach chemicals Color	\$9.54 8.50 .52 .66 .24 .12	\$10.00 9.02 .76 .67 .27 .10	\$9.41 8.32 .70 .57 .27 .05	\$10.24 8.44 .66 .46 .27 .03	\$11.56 9.34 .70 .46 .25 .03	\$11.08 8.53 .63 .49 .23	\$11.49 8.25 .60 .49 .21 .02	\$12.22 9.05 .56 .37 .19	\$13.33 10.26 .63 .34 .21	\$12.92 10.15 .61 .35 .35 .19
Sizing	.16	.15	.15	.15	.16	82	.17	.16	.14	.18
Total	\$19.84	\$19.84 \$21.07 \$19.58 \$20.37 \$22.63 \$21.34 \$21.38	\$19.58	\$20.37	\$22.63	\$21.34	\$21.38	\$22.71	\$22.71 \$25.05	\$24.55
CONVERSION: Manufacturing labor	\$3.80	\$4.00	\$4.11	\$4.15	\$3.94	\$3.83	\$3.80	\$4.19	\$4.35	\$3.73
Felts	.57	.63	19.	.56	.64	.72	92.	<u> </u>	.91	18.
Wires	4.	.45	ထို ဒ	E.	8.3	33	8	8.8	.34 .84	8
Screen plates	2.4.	ş::		3.5	3.53	20.11	20.	 	3.03	3.53
Lubricants	.07	20.	90.	90.	90.	90.	.07	80.	80.	80.
Finishing material	.52	.44	.41	.42	.45	.44	.45	35	.37	.36
Repair material	æ.	.88	.91	.75	88.	.94	1.01	1.09	66.	1.02

.65 2.03 .02	.03 11.	\$9.40	\$33.95 .34 .91	\$35.20	\$3.89	4.37	\$39.57
.03 .03	.14 .03 .16	\$10.54	\$35.59 .51 1.25	\$32.43 \$31.12 \$32.10 \$34.19 \$32.04 \$31.94 \$33.83 \$37.35	\$3.91 .28 .45	4.64	\$36.93 \$36.75 \$38.20 \$41.99
2,23	.00 .02 11.	\$9.96	\$32.67 .31 .85	\$33.83	\$3.67 .19 .51	4.37	\$38.20
2.17	.08 .03 .12	\$9.43	\$30.80 .28 .86	\$31.94	\$3.89 .21	4.81	\$36.75
2.22	.10 .03 .13	\$9.46	\$29.28 \$30.95 \$29.42 \$30.22 \$32.28 \$30.80 \$30.80 \$32.67 42	\$32.04	\$3.70 .23 .95	4.89	\$36.93
2.34	.09 .03 .13	\$9.65	\$32.28 .43 1.48	\$34.19	\$3.87 .24 .91	5.03	\$36.86 \$38.73 \$36.98 \$37.56 \$39.21
2.60	.09 .03 .15	\$9.85	\$30.22 .46 1.42	\$32.10	\$3.68 .24 1.54	5.46	\$37.56
2.34	.13	\$9.84	\$29.42 .44 1.26	\$31.12	\$3.54 .38 1.94	5.86	\$36.98
2.30	.15	\$9.88	\$30.95 .46 1.02	\$32.43	\$3.36 .40 2.54	6.30	\$38.73
2.19	.18	\$9.44	\$29.28 .42 .96	\$30.66	\$3.40 .40 2.40	6.20	\$36,86
	Miscellaneous operating ex- penses	Total	Direct cost	Manufacturing total	MARKETING: Freight, cartage and storage. Sales division expenses	Total	Total cost delivered

1 Pulp and News-print Paper Industry, Senate Document No. 31, 62d Congress, 1st Session, Washington, 1911, p. 79-

(e) ITEMIZED COST OF PRODUCTION OF GROUND WOOD PULP, BY YEARS, 1 1900-1909

(c) ITEMIZED COST OF FRODUCTION OF GROUND WOOD I OLD, BI LEARS,	FRODI	CLION	OF CIRC	NOW W	1 000	OLE, D	TOUT	3, 1000	7000-1000	
Items	006r	robr	2061	1903	1904	2002	2002	2061	8061	6061
MATERIAL: Wood	\$6.48	\$6.96	\$7.09	\$7.41	\$8.38	\$8.78	\$9.08	\$9.50	\$11.14	\$11.82
CONVERSION:		1	100	1	2	00	90.40	5	60 64	40.94
Manufacturing labor		\$2.45	\$2.37	\$2.57	\$2.53	\$2.40 00	\$2.40 .10	62.5¢	\$2.04 .11	42.54
Felts		16	12	Ξ.	Ξ.	.12	.14	.13	.10	60.
Wires		•		.01	.03	.03	.03	.04	5	40.
Screen plates	•	80.	.05	90:	90:	.07	.07	.05	.05	90.
Belting	•	10	.0.	20.	.07	90.	90.	.07	.07	90.
Lubricants		.05	.04	.03	40.	.04	.04	.04	.04	40.
Repair materials	•	.56	.49	.49	.61	.56	.62	Ŧ.	88	.59
Repair labor	•	.37	.29	33	.36	œ.	.29	.32	4.	.43
Fuel, coal	•	30.	50.		70.	0.	.01	0.	5 .	.03
Barn	•		•	.03	.04	.03	.03	30.	ල. ප	30.
Miscellaneous operating ex-				,	1		į	į	1	2
benses · · · · · · ·	•	.11	97.	40.	.05	90.	20.	.07	97.	4. 6
Office	•	•		5.	.0	3	.03	20.	33	20.
Water power	•	88	.34	.37	.36	.36	.37	.40	9.	.45
Total	4.15	4.43	4.01	4.25	4.47	4.21	4.31	4.60	5.19	4.51
Direct cost	\$10.63	\$11.38	\$11.10	\$10.63 \$11.38 \$11.10 \$11.66 \$12.85 \$12.98 \$13.39	\$12.85	\$12.98	\$13.39	\$14.10	\$14.10 \$16.34	\$16,33

Fixed charges: insurance and taxes		9.00	80.	.10	.07	.17 .08	.08	.09	.32	. 25
Total	12.	.13	.12	.12	.19	.25	.25	.25	.32	.25
Total manufacturing cost .	\$10.84	\$11.51	\$11.22	\$11.81	\$13.04	\$13.23	\$13.64	\$14.35	\$16.66	\$10.84 \$11.51 \$11.22 \$11.81 \$13.04 \$13.23 \$13.64 \$14.35 \$16.66 \$16.58

¹ Pulp and News-print Paper Industry, Senate Document No. 31, 62d Congress, 1st Session, Washington, 1911, p. 78.

Appendix G

THE INCREASE IN THE TOTAL POPULATION OF THE UNITED STATES, BY DECADES, 1790-1910 1

Census Year	Population of the United States Exclusive of Outlying Possessions	Increase over Preceding Census Per Cent.
1790	3,929,214	
1800	5,308,483	35.1
1810	7,239,881	36.4
1820	9,638,453	33.1
1830	12,866,020	33.5
1840	17,069,453	32.7
1850	23,191,876	35.9
1860	31,443,321	35.6
1870	38,558,371	22.6
1880	50,155,783	30.1
1890	62,947,714	25.5
1900	75,994,575	20.7
1910	91,972,266	21.0

Thirteenth Census of the United States, Vol. I, Washington, Government Printing Office, 1910, p. 24.

Appendix H

A COMPARISON BETWEEN THE STOCK OF GOLD; THE NOTES IN CIRCULATION, AND LOANS AND DISCOUNTS, 1889 TO 1910 ¹

(a) GOLD STOCK

Banks and Treasuries	December 31, 1889	December 31, 1899	December 31,
Europe	\$914,396,264 423,906,282 89,853,167 7,322,710 5,000,000	\$1,601,253,370 683,889,570 106,432,311 22,630,659 32,800,000 51,571,000	\$2,464,452,800 1,410,721,622 184,500,000 108,200,000 50,400,000 111,196,000
Grand Total	\$1,440,478,423	\$2,498,576,910	\$4,329,470,422

(b) NOTES IN CIRCULATION

Banks and	December 31,	December 31,	December 31,
Treasuries	1889	1899	
Europe U. S. A	\$2,818,198,481	\$2,973,194,348	\$4,324,716,358
	126,521,364	199,411,492	684,163,511
	29,078,000	21,995,908	107,240,548
	32,207,144	41,513,139	82,120,303
	5,036,093	9,091,762	8,773,000
	78,871,326	124,779,896	200,009,214
Grand Total	\$3,089,914,408	\$3,369,956,545	\$5,407,022,935

(c) LOANS AND DISCOUNTS

Banks and	December 31,	December 31,	December 31,
Treasuries	1889	1899	
Europe U. S. A	\$3,031,196,402	\$4,184,131,405	\$5,146,396,802
	3,842,272,131	5,167,895,610	12,855,303,194
	623,589,889	492,110,885	626,862,333
	149,958,980	251,467,076	870,100,890
	25,620,935	107,044,970	179,028,958
	109,874,197	501,357,073	915,641,306
Grand Total		\$10,704,007,019	\$20,593,333,483

[&]quot; Gold, Prices and Wages," by J. A. Hobson,—G. H. Doran Company, pp. 50-51.

Year	World's Annual Output of Gold	Wholesale Prices (Index Numbers)
1850	\$ 44,500,000	89.2
1851	67,600,000	98.6
1852	132,800,000	97.9
1853	155,500,000	105.0
1854	127,500,000	105.0
1855	135,100,000	109.2
1856	134,000,000	112.3
1857	134,000,000	114.0
1858	133,000,000	113.2
1859	130,000,000	102.9
1860	127,000,000	100.0
1861	122,000,000	94.1
1862	119,000,000	101.6
1863	119,000,000	91.1
1864	122,000,000	110.7
1865	126,000,000	107.4
1866	127,000,000	134.0
1867	127,000,000	132.2
1868	126,000,000	125.6
1869	125,000,000	112.3
1870	123,000,000	119.0
1871	119,000,000	122.9
1872	113,000,000	121.4
1873	112,000,000	114.5
1874	90,750,000	116.6
1875	97,500,000	114.6
1876	103,700,000	108.7
1877	113,947,200	107.0
1878	119,092,800	103.2
1879	108,778,800	95.0
1880	106,436,800	104.9
1881	103,023,100	108.4

THE ANNUAL OUTPUT OF GOLD AND THE PRICE INDEX NUMBER, 1850 TO 1912—Continued

Year	World's Annual Output of Gold	Wholesale Prices (Index Numbers)
1882	\$101,996,600	109.1
1883	95,392,000	106.6
1884	101,729,600	102.6
1885	108,435,600	93.3
1886	106,163,900	93.4
1887	105,774,900	94.5
1888	110,196,900	96.2
1889	123,489,200	98.5
1890	118,848,700	112.9
1891	130,650,000	111.7
1892	146,651,500	106.1
1893	157,494,800	105.6
1894	181,175,600	96,1
1895	198,763,600	93.6
1896	202,251,600	90,4
1897	236,073,700	89.7
1898	286,879,700	93.4
1899	306,724,100	101.7
1900	254,576,300	110.5
1901	260,992,900	108.5
1902	296,737,600	112.9
1903	327,702,200	113.6
1904	347,377,200	113.0
1905	380,288,700	115.9
1906	402,503,000	122.5
1907	412,966,600	129.5
1908	442,476,900	122.8
1909	454,059,100	126.5
1910	455,259,800	131.6
1911	461,542,100	129.2

¹ Figures 1850 to 1889 from "The Gold Supply and Prosperity." B. W. Holt, New York, The Moody Corporation, 1907. pp. 76-79. Gold figures 1890 to 1912 from "Statistical Abstract of the United States, for 1912," p. 797. Wholesale Prices, 1890 to 1912, Bulletin 114, United States Bureau of Labor Statistics, Washington, Government Printing Office, 1913, p. 9.

Appendix J FARM VALUES, 1900-1910 (a) TOTAL FARM VALUES, 1900-1910

			0061	огвг	Per Cent, of Increase
Value of all Property	:		\$20,439,901,000	\$40,999,449,000	100.5
Value of Land		•	. 13,058,008,000	28,475,674,000	118.1
Value of Buildings			3,556,639,000	6,325,452,000	77.8
s and Machin	•			1,265,150,000	68.7
Value of Live Stock	:		3,075,478,000	4,925,174,000	60.1

(b) Inc	(b) INCREASE IN LAND VALUES. 1900-1910	ALUES. 1900-1910	0	
Dinision or Section	0702	0001	Increase	9)
and an analysis		200	Amount	Per Cent.
United States	\$28,475.674,169	\$13,058,007,995	\$15,417,666,174	118.1
New England	382,134,424	283,460,803	98,673,621	34.8
Middle Atlantio	1,462,321,005	1,219,928,090	242,392,915	19.9
East North Central	7,231,699,114	3,973,023,780	3,258,675,334	85.0
West North Central	10,052,560,913	3,892,877,273	6,159,683,640	158.2
South Atlantic	1,883,349,675	899,820,936	983,528,739	109.3

87.4	184.8	313.4	66.5	104.2	131.3	203.5		73.4	0.12
_								44,022	22,152
_			1,403,420,258	_		2,293,725,544		5,201,944,022	10,215,7
708,153,451	953,785,562	284,064,810	842,893,290	9,369,289,946	2,561,759,949	1,126,958,100		7,084,387,060	5,973,620,935
1,326,826,864	2,716,098,530	1,174,370,096	2,246,313,548	19.128.715,456	5,926,275,069	3,420,683,644		12,286,331,082	16, 189, 343, 087
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tral	West South Central] :		•		Mississippi	West of the Mississippi
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¹ Thirteenth Census of the United States, Vol. V, Washington, Government Printing Office, 1910, p. 42.

Appendix K

THE INCREASE IN THE LAND VALUE (ASSESSED SEPARATELY FROM IMPROVEMENTS) IN CERTAIN CITIES

(a) NEW YORK LAND VALUES 1

	Manhattan	2	Brooklyn		Queens	~	Greater New York	York
Year	Total	Per Capita	Total	Per Capita	Total	Per Capita	Total	Per Capita
1906	\$2,600,140,211	\$1,196	\$456,313,602	\$325	270	\$388	233,	\$811
1907	2,707,862,301	1,213	485,913,085	336	585,	260	393,	830
1908	2,807,194,281	1,225	576,647,240	386	182,629,206	785	3,843,165,597	698
1909	2,829,746,871	1,201	584,521,230	380	899	2092	127	821
1910	2,905,201,140	1,201	596,150,739	375	180	22.2	129,	849
1911	3,114,812,658	1,303	794,148,607	464	,680	888	925,	915
1912 2	3,127,852,473	1,296	786,159,510	450	644,	862	357,	868

(b) THREE EASTERN CITIES

		Ţ	re	20	'n,	Frenton, N. J. ³	J.3			~	lew.	ark	5, 7	Newark, N. J.4	J.4			Bos	ton	, 1	Иαз	Boston, Mass. 5	
1906.		:					\$21,866,000	1907							122,904,000							\$365,548,000	8,000
1907	•	•	•	•			21,707,000	1908.	•	•					121,465,000		•	•	•			443,68	5,000
1908	•	•	•	٠	•		21,735,000	1909		٠		:			125,515,000		•	•				532,95	4,000
1909	•	٠	•	٠	٠		21,866,000	1910.	_	•	•				129,469,000		•	٠				618,64	2,000
1910.		•	•	•			22,140,000	1911		•					134,764,000		•	•				672,10	000,00
1911		•		•			23,530,000	1912	•	•	•				141,059,000	1911	•	•				685,46	4,000
1912.		•	•				23,561,000																

(c) THREE WESTERN CITIES

		D	all	38	I	Dallas, Tex.6				H	lou	stor	~	Houston, Tex. 7		Se	ıttl	0.5	Wa	Seattle, Wash.8
1907	١.			1	١.		18	1904	١.			ı.						•		\$ 70,038,000
1908				•	•	21,300,000	8	1905	•	٠					1906.			•	•	125,735,000
1909				•	•		8	1906	•	•			•		1907		:	٠	•	155,751,000
1910.					•		900	1907	•	•	•		•		1908		:	٠	•	178,427,000
1911.				•	٠		900	1908	٠	•	•				1909.		•	•	•	184,737,000
1912.				•	•		900	1909	•				•		1910.			•	•	205,309,000
								1910	٠						1911			•	•	212,014,000
								1911.	•	•	٠			46,916,000	1912.	٠	:	•	•	212,929,000
								1912.	•	•			:							
	1			1	1				1	1		1	1			1	l	١	l	

1 Report of Commissioner of Taxes and Assessments of the City of New York, M. B. Brown Printing and Binding Company, 1912, pp. 20-22.

Letter from Commissioners of Assessment of Taxes, December 18, 1912. anuary 1, 1912.

Letter from Board of Assessment and Revision of Taxes, December 27, 1912.

Annual Report of the Assessing Department for the Year 1911, City of Boston Printing Department, 1912, p. 16.

Letter from Commissioner of Finance and Revenue, April 8, 1913.

Letter from the Chairman of the Board of Appraisement, December 20, 1912.

Letter from the County Treasurer, April 1, 1913.

Appendix L

AVERAGE WAGE RATES PER MONTH FOR OUTDOOR FARM LABOR, HIRED BY THE YEAR, WITHOUT BOARD, 1866 TO 1909 1

Year	United States	North Atlantic	South Atlantic	North Central	South Central	West- ern
1866	\$15.50	\$22.04	\$10.67	\$20.39	\$12.57	\$40.28
1869	15.50	22.36	10.72	20.01	13.18	46.38
1874 or 1875	17.10	24.09	12.73	21.11	14.55	40.69
1877 or 1878						
1878 or 1879						
(combined)	16.79	20,42	11.49	20,73	14.88	33,68
1879 or 1880	17.53	21,23	12,25	21.88	15,16	34.77
1880 or 1881	18.52	22,52	12.87	22.81	16.31	36.01
1881 or 1882	19.11	24.21	13,70	24.08	16.52	36,67
1884 or 1885	19.22	23.88	13.79	23,51	15.65	37.19
1887 or 1888	19.67	24.15	13.88	23.67	15.84	35.64
1889 or 1890	19.45	24.72	13.94	22,25	16.10	33.96
1909	25.46	30.89	18.76	30.55	20.27	44.35

¹ United States Department of Agriculture, Bureau of Statistics,—Bulletin 99, Washington, Government Printing Office, 1912, p. 29.

Index

AGRICULTURAL labor, wages of, 194, 195 American city population, change in 1790-1910, 45 American life, changing form of, 41-51; movement from villages into cities, 43 American living standard, growing higher, 41; increase in wants, 35, 36 Anthracite coal industry, wages in, 197, 198

Average prices, 1890-1913, Appendix B; retail, 1898-1913, Appendix B

"BACK to nature," possibilities of. 210 Banking, necessity for centralized

form of, 28 Boston, increase in land value, 186, 187, 191; land valuation, 1887-1911, 189; price

creases, 1890-1910, 110 Brooklyn, per capita increase in land value, 188

Building trades, wage increase in, 199

Buying, education for, 229; rules for, 232

CEREAL crops, production of, 129 Cereals, per capita acre yield in United States, 132

Changes in American family life, 48-50

Children, services of, 224

Cities, effect of development of, on services, 57 City dweller and the land, 218

City land, taxation of, 291

City land values, effect of New York Subway on, 185; increase in, Appendix K

City man and the land, 222 City markets and efficiency of food distribution, 245

City woman and the land, 222,

Civilization, effect of on goods and services, 53; pressure of on living standards, 82; and increasing prices, 206

Cloths and clothing, price increases, 171

Coal, production of, 146

Coal Trust, and the price of coal, 162

Cold storage, part in price regulation, 244-245

Combination and profits, 279, 280 Comforts, definition of, 67

Compensated dollar as a medium of exchange, 269, 270, 271 Competition, effects of, 278; and

progress, 210; and small profits, 279; undesirability of, 210 Conservation, definition of, 248;

effect of on cost of living, 248-258; essential element in price control, 248; and the State, 256, 257, 258

Consumer, power of, 232, 233;

see Buying

Cooperation, advantages of, 53; consumers', abroad, 236; consumers', United States, 237, 238; and social service in reduction of living costs, 301; transition from competition to, 279, 280

Cost of government, 88, 89; in France, 89, 90; in Massachusetts, 89, 90; in United

Kingdom, 89, 90

Cost of living, appeal of the home, 32; attitude of Democratic party toward, 25-27; attitude of political parties toward, 23, 24; attitude of Republican party toward, 31; burden of statesmanship in reduction of, 205; standard decided by civilization, 35; effect of Democratic policy on, 29; effect of producers' cooperation, 246; factors increasing the, 201, 202; forces modifying, 117; increase in prices, 1890-1913, Appendix B; increase in wages, 200; magnitude of problem, 297, 298; movement to the land, 220, 221; New Jersey, 1898-1913, Appendix B; outlook for reduction of, 295-302; political issue, 23-30; problem of, originates in the home, 33; responsibility for high, 122, 123; social problem, 31-40; variation in for New Jersey towns, Appendix D

Costs of production, 120; of

paper, Appendix F

Cotton, production of, 146 Credit, international adjustment of, 275; medium of exchange, 273, 274; monopoly of, 285; socialization of, 274, 275

Credit money, effect of on prices, 147; use of, 139

Currency law, effects of on prices,

28; passage of by Democratic party, 28

DAIRY products, supply of, 128 Democratic administration, steps toward reduction of cost of living, 296

Democratic party, activities of toward price reduction, 27, 28; attitude of toward cost of living problem, 24-27; effect of high prices upon, 26, 27; regulation of trusts, 29; responsibility of for reducing living costs, 295

Domestic science, education for, 230; home schools for the teaching of, 236; home training in, 235; importance of, 233; place of, in school, 231

Drug Trust, and the price of drugs, 1890-1912, 161

EARNINGS, and food prices, New Jersey, Appendix C

Eastern States, increase in farm land value per acre, 181

Economic forces, and price changes, 117

Education, effect on efficiency of food distribution, 247; effect on standard of necessaries, 82; for buying, 229, 230; for domestic science, 230; social (see Social Education)

Effort, goods the end of, 97

Exchange medium, compensated dollar, 269-271; fiat money, 271, 272; increasing efficiency of, 267-276; increasing stability of, by international agreement, 276; stabilizing the, 267.

Expenditures, for various kinds of food, III; per cent. for certain kinds of food, Appendix E

Extravagance, in modern life, 79, 80

FAMILY, a buyer, not a producer, 50, 51; characteristics, changes in, 47-50; economic solidarity of in nineteenth century, 49; industrial in the twentieth century, 49; necessities and luxuries of, 38

Family life, basis of cost of living

problem, 46

Farmer and the land, 225

Farm labor, wages of, 194, 195,

Appendix L

Farm land, increase in value of, 1900–1910, 179, 180; taxation of, 292; total value, Appendix J

Farm land increases, East and West, 181; of geographical divisions in United States, 180

Farm land values, increase in, Appendix J

Farm products, price increases,

1890-1912, 170
Fiat money, as a medium of ex-

change, 271, 272 Fillebrown, C. B., quoted, 186,

187

Fisher, I., quoted, 114, 140, 141, 143, 149, 151

Floods and conservation of timber land, 252, 253

Folks, Homer, quoted, 185
Food distribution, and commission
merchants, 244; and the jobber, 244; and specialization,
241, 242; direct relation between producer and consumer,

242, 243
Food expenditures, per cent. for certain foods, Appendix E; proportion of and price changes, 111-112

Food, increasing efficiency of dis-

tribution, 240-247; kinds bought, III; rise in price of, 23

Food prices, 1890-1913, Appendix B; and earnings, New Jersey, 1898-1912, Appendix C; effect of farm land increases on, 184; variations in Washington, 112, 113

Food supply, adequacy of, 131, 132, 135; and population increase, 124, 131, 132; limitations on, 125; and the meat famine, 129, 130

France, cost of government in, 89,

Franchises and monopoly profits, 282, 283

Fuel and light, price changes in,

GENERAL prices, fallacy of, 151 Glass Trust and price of glass products, 1890-1912, 161

Gold, annual output of, 146; annual output of and the price index, Appendix I; as a standard of value, 137, 138; as the medium of exchange, 267; effect of on prices, 141; increase in supply of, 144; stock of, Appendix H; total supply of, 153

Gold production, 1850-1912, Appendix I; increase in, 144, 145
Gold supply, effect on prices, 154; government regulation of, 268,

269; increase in, 136; offsets to, 145; of the world, 146 Goods philosophy of life, 97

Government, change in attitude toward, 299, 300, 301; cost of, 88, 89; part of in regulation of monopoly power, 287, 288; part of in regulating service and prices, 299, 300 Growth of cities, effect of growth of industry on, 45

HEALTH and labor efficiency, 262 High cost of living, attempts to personalize blame for, 204; complexity of, 116; responsibility of producer for, 204

Hobson, J. A., quoted, 147 Holt, B. W., quoted, 138, 139,

140, 153

Home, and the teaching of domestic science, 235; changes in, 234, 238; functions of, 234 Home schools and domestic sci-

ence, 236

IMPORT duties, reduction of, 27 Income and wants, relation of, 212

Income, burden of services upon, 64; effect of industrial revolution on, 240, 241

tion on, 240, 241 Income tax, effectiveness of, 292,

202

Increase in cost of production, complexity of factors, 165, 166; and cost of product, 165; effect of transportation rates on, 166; interest, 166

Increase in land values, Boston, 186, 187; city, East and West, 190, 191; effect on cost of liv-

ing, 166

Increase in Massachusetts yearly earnings, 198

Increase in total population, 1790– 1910, Appendix G

Increase in wages, and the cost of living, 200

Increase of wants, effect of on happiness, 36

Increased cost of living, causes of and remedies for, 296, 297 Increased efficiency of labor, defi-

nition of, 259

Increasing cost of living, meaning of, 36, 37; wants, increase in, 37

Increasing gold supply, 136

Increasing prices, causes of, 116 Individualism, its part in industry, 298, 301

Industrial combination, and the

cost of living, 155

Industrial monopoly, control of profits, 286; effect on prices, 285, 286

Industrial revolution, overthrow of handcraft industries, 43; secondary sources of income,

240, 241

Industry, changing form of, 44; effect of inventions on, 43 Inheritance tax, use of, 292, 293

JENKS, J. W., quoted, 156, 157

LABOR costs, increase in, 193-200 Labor efficiency and health, 261; and premature death, 262, 263; and scientific management, 264, 265; and specialization, 263, 264; and wages, 265; effect of education and skill on, 260, 261; possibility of, 259

Labor, increase in cost of, 1866-

1909, 195

Land, and the city dweller, 218; place of in production, 176; movement to the, 217, 218, 219; taxation of, 290, 291; ownership and monopoly power, 281, 282

Land products, effect of conservation on prices of, 242, 249

Land values, increase in city, Appendix K; increase in Boston, Appendix K; increase in Brooklyn, Appendix K; increase in Dallas, Appendix K; increase in Houston, Appendix K; increase in Newark, Appendix K; increase in New York City, Appendix K; increase in Trenton, Appendix K Layton, W. T., quoted, 148

Living, American standard of, 33; each social group its own meaning of, 34; meaning of, 33-35; purpose of, 37

Living standards, diversity of, 34 Loans and discounts, Appendix H Lumber and building materials, price increases, 172

Luxuries and necessaries, distinction between, 68

Luxuries, and the neighbors, 92; and the well-to-do, 69; apprisal of, 69; definition of, 67; growth of, a menace, 71; production of, 69, 70; profits from, 61; reasons for, 68, 71, 72; rising standard of, 69; statistics of production, Appendix A; use of as a bar to necessaries, 70

Luxury, social burden of, 77

MACHINERY, development of and productive labor, 63; monopoly of, 286, 287

Mail order house, part of in reducing cost of living, 246, 247
Making a living, changes in methods, 42

Making work, fallacy of, 76 Malthus, T., quoted, 131, 132; predictions of, 132; ultimate philosophy 132

philosophy, 133 Manufacturing industries, increase in wages, 199

Massachusetts Commission on Cost of Living, quoted, 164, 200
Massachusetts, cost of government in, 89, 90; increase in yearly earnings, 198; statistics of yearly earnings, 198

McMaster, J. B., quoted, 86, 87 Meat animals, decrease in number of, 127, 130

Meat famine, menace of, 129 Meat supply, and the increase in population, 125, 126

Metals and implements, price changes in, 173

Middleman, effect of on cost of living, 246, 247 Mileage of railroads, 146

Mineral land, taxation of, 292
Mineral resources, conservation
of, 250

Money and credit, international adjustment of, 275
Money and prices, 138

Money, total in circulation, 1912,

Monopoly, of machinery of production in United States, 287; and the price of boots and shoes, 162; and rising prices, 119; prevalence of in United States, 278

Monopoly prices, how fixed, 251 Monopoly profits and the franchise, 282, 283; and land ownership, 281, 282; and the patent, 284; definition of, 277; elimination of, 277-288

NATURAL resources, classes of, 249

Necessaries and luxuries, distinction between, 68

Necessaries and social standards, 84

Necessaries, ascending standard of, 79; definition of, 67, 79; effect of education on, 82; effect of unequal income on, 84; in the eighteenth century, 85-87; production of, 80; rising standards, 90; statistics of production, Appendix A

Neighbors, and a "goods" standard of judgment, 94, 96; and competition, 93

Newark, increase in land value,

New Jersey Bureau of Statistics,

quoted, 113

New Jersey, cost of living, 1898-1913, Appendix B; price increases since 1898, 109; variations in cost of living for sixtysix towns, Appendix D; prices, percentage of increase, 1898-1911, 110

New York City, assessment of land and improvements, 187, 188; Bronx total land value increase, 188; increase in land values, Appendix K; effect of subway on, 185; Manhattan per capita increase in land value, 188; Richmond increase in land values, 188; total increase in land value, 188, 189

NINETEENTH CENTURY, development in, 298, 299; function of government, 299

Nitrogen starvation, menace of,

133, 134

North Central States, farm land increases, 1900-1910, 183; increase in population and acreage, 182

Notes in circulation, Appendix H. Nutrition and the nitrogen sup-

ply, 133, 134

PAPER, cost of production of, Appendix F

Paper Trust and price of paper products, 161

Patents and monopoly profits, 284 Philanthropy as a luxury, 72, 73 Pig-iron, production of, 146

Platinum, as a medium of exchange, 268

Population, increase of and the food supply, 124; increase of and the meat supply, 125, 126; increase in total, 1790-1910. Appendix G

Price change figures, method of collection in New Jersey, 108

Price changes and economic forces, 117; and proportion of food expenditure, 112; fuel and light, 114; future of, 114, 115; in necessaries, and the \$900 family, 103, 104; in necessaries of life, 103-115; Massachusetts data, 107; New Jersey data, 107, 108; reasons for, 105, 106; universal interest in, 105; variation in, 110; Washington data, 107; wholesale, 113, 114

Price data, difficulty in obtaining,

106, 107

Price increase, causes of, 116; raw materials, effect on cost of living, 167; New Jersey, 1898– 1913, Appendix B; ratio of, 1890-1913, Appendix B; vital to workingman, 104, 105

Price increases, a conquerable obstacle, 206; and the trusts, 155, 156; cloths and clothing, 171; farm products, 1890-1912, 170; inconvenient to well-to-do, 103, 104; lumber and building materials, 172; meaning to well-to-do, 39; meaning to workingmen's families, 39; methods of checking, 205

Price index, how obtained by United States Bureau of Labor, 169; and annual output of

gold, Appendix I

Price movements, of the nine-

teenth century, 149, 150, 152,

Price of boots and shoes, and the trust, 162; coal, and the Coal Trust, 162; drugs, and the Drug Trust, 161; glass products and the Glass Trust, 161; lumber, effect of rise in timber land values on, 178; oil, and the Standard Oil Co., 158, 159; paper products and the Paper Trust, 161; proof spirits and the trust, 162; steel, and the Steel Trust, 160; sugar, and the Sugar Trust, 159; tobacco, and the Tobacco Trust, 160

Price reduction, a slow process,

207

Prices, 1890-1913, Appendix B; 1898-1913, Appendix B; adjustment of wage scale to, 23; and money, 138; effect of cold storage on, 245; effect of conservation of timber land on, 252; effect of currency law on, 28; effect of increase in raw material on, 163; effect of increased labor costs on, 193, 194; effect of market price bulletin on, 245, 246; effect of producers' cooperation, 246; effect of substitution of natural resources on, 250, 251; effect of upon Democratic party, 26, 27; principles for the reduction of, 206; rapid increase in, 25; regulation of terminals and markets, 245; rise in, and income, 32; tariff, and excessive, 26

Production, a prerequisite to consumption, 78; costs of, Appendix F; costs of and rising prices, 120, 121; dairy products, 128; redirection of, 70; three important factors in, 166 Production of luxuries, 69, 70
Production of necessaries, 80-82
Production of necessaries and
luxuries, Appendix A

Productive labor, decrease of, 62 Progressive party, attitude of toward cost of living, 24

Property ownership, as a source of income, 77

Prosperity and spending, 73
Public services, an essential to
modern life, 61

Purchaser (see Buying and Consumer)

Purchasing power and the increasing gold supply, 139

RAILROAD wages, increase of,

Railroads, mileage of, 146

Raw materials, increase in cost of, 165-175

Reduction of cost of living, and Democratic success, 29

Reducing the cost of living factors, 201

Regulation of terminals and markets, effect of on prices, 245 Remuneration and labor ef-

ficiency, 265

Rent, regulation of, 291, 292 Republican party, attitude of toward cost of living problem, 23, 24

Resource monopoly, effect of on prices, 250, 251

Rise in American city land values universal, 187

Rise in prices and exhaustion of timber supply, 179

Rise in timber land value, effect on price of lumber, 178

Rising prices and production, 120,

Rising prices, artificially induced, 119; causes of, 117, 118; factors in, 202, 203; forces behind, 117; responsibility of, 122, 123; statistics of 1890-1913, Appendix B

Rousseau, philosophy of, 210 Rural life, change in, 47; minimum of service in, 56 Ruskin, John, quoted, 71

Scientific management and labor efficiency, 264, 265 Self-service, advantages of, 227;

impossibility in modern society, 53

Senate Committee on Wages and Prices, quoted, 199

Servant problem, among the wellto-do, 58; an element in living standards, 54; and factory work, 59; and servility, 57; effect of city life upon, 57

Servants, abolition of, 59; and servility, 224, 225; burden of, 59; dominance of, 59; effect

upon happiness, 63

Services, an element in civilization, 52; and group life, 64; as a burden upon income, 64; as comforts and luxuries, 65; effects of the servant problem, 58; increasing demand for, 52; increase in service occupations, 61; limitations of custom, 54; minimum in rural life, 56; public, 60; relied on by the wellto-do, 55

Servility and servants, 224, 225 Show, the sinecure home, 97 Simple life, and the cost of living,

Simple life, effect of neighbors on, 209; possibilities of, 215, 216

Smith, M. E., quoted, 142 Social education and the home, 239

Social education, purpose of, 228 Social emulation, increasing struggle, 101

Social snobbery, forces opposing,

Soil fertility, conservation of, 253 Specialization and labor efficiency, 263, 264

Spending, a class activity, 73; as a means of circulating money, 73; definition of, 73; for comforts and luxuries, 74; or prosperity, 73; to "make work," 75, 76

Standard of living, American, 34, 35; American desire to excel, 35; increase in comforts and luxuries, 67; increase of necessaries, 79; influence of science advance on, 35, 36; in the eighteenth century, 85-87; pressure of civilization on, 82; set by the neighbors, 92, 93; tendency to rise, 36; universal wants, 37

Standard of value, need of, 136 Standard Oil Company, 158, 159 State, evolution of the modern,

Steam vessels, tonnage of, 146 Steel Trust, and the price of steel,

Substitution of resources, effect on prices, 250, 251

Sugar Trust, and price of sugar, 159

TARIFF, and excessive prices, 26; reduction in, 25

Tariff Bill, passage of by Democratic party, 27, 28

Taxation, and reduction of monopoly power, 289; of city land, 291; of farm land, 292; of mineral land, 292; object of, 293, 294; readjustment of,

289-294; regulation of rent, 291, 292; of timber land, 292 "Things" as an object of endeavor, 214

Timber land, conservation of, 251, 252; reforestation and elimination of waste, 252

tion of waste, 252 Timber land values, phenomenal

increase in, 177, 178
Timber land, taxation of, 292
Tobacco Trust, and price of tobacco, 160

Trenton, increase in land value,

Trust, definition of, 158 Trusts, and prices, 163

UNITED KINGDOM, cost of government in, 89, 90

United States, increase in labor costs, 1866-1909, 195; price increases, 1890-1911, 110; total farm land increases, 180

VALUES, Boston land, Appendix K; Brooklyn land, Appendix K; Dallas land, Appendix K; Houston land, Appendix K; land, city, Appendix K; land, farm, Appendix J; Newark land, Appendix K; Seattle land, Appendix K; Trenton land, Appendix K

WAGES and prices, New Jersey, 1898-1912, Appendix C

Wages, anthracite coal industry, 197, 198; increase in agricultural labor, 195; increase in and cost of living, 200; increase in building trades, 199; increase in manufacturing industries, 199; increase in railroad industry, 196; of farm labor, Appendix L

Wants and income, balance of,

Wants, control of, 212; persistence of, 213; restriction of,

Washington Bureau of Labor, quoted, 112

Washington price increases, 1900-1910, 110, 113

Water power, government development of, 255

Water resources, and the elimination of monopoly, 254

Water resources, conservation of,

Well-to-do, and luxuries, 69 Well-to-do, and the servant problem, 58

Western farm land values, abnormal increase in, 180 Western states, increase in farm

land value per acre, 181
Wholesale prices, 1890–1912,
price index United States

Bureau of Labor, 168
Woodruff, C. E., quoted, 133
Woolen Trust, increase in price

of clothing, 162 Workingmen's families, expenditures of, 38, 39

Work, "making work" argument, 75

World's development, statistics of, 146

World starvation, possibility of, 131, 132

















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