PHILADELPHIA

SOCIAL SCIENCE ASSOCIATION.

THE

Principles of Rational Taxation.

Read at a Meeting of the Association,

NOVEMBER 21ST, 1889,

BY

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Published by the
PHILADELPHIA SOCIAL SCIENCE ASSOCIATION,
720 Locust Street, Philadelphia.

The Principles of Rational Taxation.

One of the most pressing needs of the present day is an increase of revenue, by which our city and local governments can make the improvements desired by all good citizens. The condition of our great cities is a fair example of the urgent need of more money for public uses. The streets are dirty; the water is bad; a large part of the pavements need to be replaced; the sewerage is deficient; and last but not least, the public schools, though improving, are not adequate to the needs of the city, nor have they that equipment necessary for their best use. Doubtless there are many citizens who look upon this lamentable state of affairs with indifference, and who worry more about a high tax rate than they do about the miseries which flow from the present deplorable condition of our city. Yet I hope there are many who take a more rational view of the situation and who are ready to listen to a plea for more revenue, if some rational plan is advanced by which it can be secured.

I use the word "rational" advisedly because the popular mind has never laid aside those crude notions of taxation which grew up among our ancestors at a time when taxation was a form of oppression used by rulers for their personal advantage. Past systems have been designed to hide the burden of taxation by placing it where the least opposition would be aroused. At an earlier period this method seemed a success, and it might still be a success, if the demand for extensive public improvements had not required more revenue than the old system of taxation could furnish without violent opposition. Since we cannot increase the present tax rate without encountering all the opposition that new taxes would cause, it seems to me a favorable opportunity to take up the whole subject in a systematic way. If a new point of view can be acquired through which a solution of this great problem is gained, it will be worth our while to reach it even if the journey to it leads along a way we dislike to travel.

Every theory of taxation must be based upon some theory of the distribution of wealth. Each writer upon taxation starts with the assumption that the wealth to be distributed to the factors in production follows some given law. Doubtless many persons are not conscious of what they assume ; yet if we examine into their theories some law of distribution will be found, from which their system of taxation can be developed. In choosing between these different theories of distribution it is not necessary to decide in an absolute way upon their truth or falseness. The different theories are not really exclusive since each of them is true, or nearly so, in some stage of industrial progress. It concerns us much more to ascertain which of them corresponds most closely to the actual conditions by which we are surrounded in the America of to-day.

To get the key to the distribution of American taxation we must analyze our own industrial conditions and trace the distribution of wealth into the hands of the various groups of persons who make up our producing classes. Any solution of the problems of taxation demands a previous investigation of the lines along which the results of improved production tend to diffuse themselves. Where are the increased revenues absorbed ? Who gets the benefits resulting from all the saving of labor which has been introduced in the last fifty years ? Until these questions can be satisfactorily answered there is little hope of solving the more complicated problems which arise in taxation. If all this increase of wealth passes into the hands of the general public without loss from waste or from absorbtion by favored persons, the burden of taxation rests in a different place from what it does if the greater portion of it is wasted in useless competition or absorbed by successful combinations.

I use the term "waste" in a broad way to indicate all those causes which keep the price of goods higher than they might be if the sellers made no effort to attract customers. In former times the sellers of goods remained quiet in their places of business and awaited the arrival of buyers. If one store sold cloth at a lower price than its competitors, the buyers of themselves sought out the place and made their purchases. But those good old days are gone. A seller must now be ever on the alert to attract trade or his rivals will soon displace him. His store must be upon a good street. He must pay large sums for advertising. Agents on large salaries must be sent out to induce customers to buy his goods. These and many other expenses must be met by any one who expects to be successful in trade at the present time. But what is the result upon prices? Are not prices in our stores much higher than they would be if the buyers sought the sellers instead of the sellers the buyers? Would not sewing machines and organs be cheaper if the persons who desired to purchase them should look up the dealer instead of the latter searching carefully all over the city for them? The number of dealers in any article is but a small fraction of the number of buyers, and they can find the proper store much more easily than the dealers could hunt up their customers.*

Do not misunderstand me. I do not wish to find fault with any one or any class of business men. They do what they must do under the circumstances, and we have no right to find fault with them as individuals. Still it is proper that we examine the effect of this grand rush for trade upon the price of commodities and upon the welfare of the city. If a given merchant does not use all the familiar means to advance his interests some more pushing rival will steal away his trade; yet is the trade of the city as a whole increased by all these efforts to displace rivals? Is any more soap, coal, or shoes sold in this city because they are advertised in the street cars? Do all the circulars our grocery men leave at our doors, increase the quantity of coffee and sugar consumed in the city? Do the high rents paid for good localities increase the whole local trade, or does the rent merely indicate the advantage which one rival for the same trade has over another?

A little thought, I think, will show that a large part of these expenses do not add to the general welfare of the city. If they

* See my "Stability of Prices," page 51 (Publications of the American Economic Association.)

are incurred by one of a number of rivals he can gain trade at the expense of the others. But if they are incurred by all of the dealers alike no one gets more trade than he would have had without them. The merchants must all charge a higher price for their wares to make good this expense and the public have a burden without a corresponding benefit.

Another form of waste arises from a great increase of retail stores. Each new store has attractions by which it secures a share of the trade. Take the shoe stores of the city as a sample. Think how thick they are, sometimes several in a single block. As they must duplicate the stock of goods, employ many extra hands and pay rent on many unnecessary buildings, is it any wonder that the price of shoes is so high. Notice also the increase of milk and baker's wagons. The continuous rattle of their wheels on our streets every morning tells only too well the miles of useless journeying they necessitate. These causes are at work in nearly every line of retail trade. A recent investigation shows that the number of retail dealers in this country has increased four times as fast as population.

Keeping these facts in mind it is easy to see where a large part of the increase of productive power has gone. In proportion to their product our factories employ fewer men, but these displaced men have been to a large extent absorbed by the retail trade. The small factory has been closed by its larger rival, but the owner, or at least some one of his class, has opened a small store in its place.

The same tendencies show themselves in the wholesale trade. Each manufacturer or dealer must resort to many costly means of preserving his trade, which are of no advantage to the ultimate consumer. Each one must do what his rivals do to keep himself afloat, but the public must foot the bills. Do farmers get any advantage from the intense rivalry of the firms who resort to so many costly expedients to sell them their machinery? How much do the whole body of commercial travelers, who are said to cost the wholesale trade $200,000,000 a year, increase the quantity of goods which are annually sold to the American people.

This enormous waste is a leading cause of the present tendency to form trusts or similar combinations. As soon as a trade becomes united in some organized way the whole body of these useless expenses can be lopped off, and the resulting economy is the main source of the increase of dividends. A legitimate trust is an organization to save waste and it is not likely to continue long in existence if it tries to raise prices higher than they would have gone if a reckless competition had continued. Of course the results of the saving pass largely into the possession of the trust, yet saving is better than wasting whoever may get the benefit.

There is, however, besides the waste of competition, another absorbent of the results of improved production which demands attention. I refer to the growth of rent both of city and of country property. Land is a limited monopoly and we must all compete for its use. The growth of population demanding more food, raises the value of farming lands, and the aggregation of thousands of people in our large cities has the same effect upon the price of city lots. There seems no limit to the rise in the value of land so long as an intense competition prevents the capitalists and laborers in our industries from keeping their share of the increase of productive power. As soon as an improved process is in general use, a change in price or an increase of waste follows through which the greater part of the benefit of the improvement passes out of the hands of both employer and laborer. What is not lost in waste is likely to fall into the possession of land owners through the increased competition for farms, houses and stores. The rapid rise of rents in cities and the enormous increase of the capital invested in mortgages upon farming lands, indicate to some extent how great has been the absorption of the results of increased production by the owners of land and of city lots.*

Having shown how the classes protected from competition either acquire or waste the increase of our productive power, let us see if they are as successful in avoiding taxes as they are in absorbing increased revenues. If the popular verdict is to be taken their success is as great in the one direction as in the

* See chapter V of my Premises of Political Economy (Lippincott, Philadelphia.)

other. This opinion, however, is based more upon a feeling of opposition to monopolies than upon any careful examination of the facts bearing upon the case. There are two limits of prices. The one limit so low that sellers will refuse to part with their goods if the price goes lower. The other is so high that buyers will stop buying if the price goes above it. It might seem that a monopoly could ask any price they desired, but this assumption is not a fact. Where the production is upon a large scale a large quantity must be sold to make the business pay. It is more profitable to use the full productive force at a lower price than to employ only a part of it at a higher price. A limit is thus reached at which the maximum profit is realized and no intelligent monopolist would desire to risk a higher price. Even the sugar trust found there was a limit to the price which could be obtained for sugar, and having asked too much they were compelled, in their own interest, to reduce the price again. It is doubtless true there would be a large sale of sugar even if the price were raised to twelve cents a pound, yet at each successive rise of the price of sugar above its cost of production, the quantity sold will be rapidly contracted by the use of other kinds of food or by substituting other sweets. There is also great risk that more capital will be attracted to the business with an over-production and a fall of prices as a result.

In our railroad traffic we see clearly the two limits of price. In summer when there is competition by water the rates are forced as low as the cost of the traffic will permit. In winter, however, when competition by water ceases, the rates quickly pass to the upper limit. The problem now is to put rates as high as possible and yet not discourage traffic.

The effect on prices of the modern system of competition encouraging waste is the same as that of a monopoly or combination. Prices are forced to the upper limit, above which they could not go without discouraging trade. When the conditions of a business are such that a large expenditure of money in attracting customers, will give a merchant an advantage unless his rivals follow his example, the general use of extensive advertising, traveling salesmen, expensive stores in fashionable localities raise prices far above the cost of production. The small dealer who has not the capital to increase his trade by such expensive means moves his store nearer to the homes of the consumers, so that the advantage of locality may in a measure counteract advantages possessed by richer rivals. A multitude of small stores spring up to profit by the advantage of locality, and prices are separated still farther from the cost of production to allow the dealer to pay his rent and secure his living from the small stock of goods demanded by the locality.

When all these causes get in full operation, and each rival resorts to new expedients to draw the trade of others to himself, there is no limit to the rise of prices except at the point beyond which the people will cease to purchase in large quantities. So we have practically the same limit to the rise of prices for a system of wasteful competition as for monoplies. If they follow their own interest monoplies cannot force prices higher than a system of waste can. To the public as buyers, the effect on retail prices is the same under both systems. All is gotten from the buyer it is possible to do without preventing a sale.

In the leading professions the same influences are at work by which the price of services are forced to the upper limit. The tendency of lawyer's fees are not towards the real cost to the lawyer in time and energy, but towards the point beyond which people would cease to employ them. And with the doctors the same tendencies are even more easily seen. A young doctor could not rely upon cheapness to attract business. He must in some way get into the good graces of a part of the public, take an active part in some church, or society, and in other ways get himself into notice. But all these means of securing trade cost money, and he must make his bills large enough to get it all back and leave enough for a good living.

The old formula about competition reducing prices has yet so strong a hold on the public that they do not appreciate the changes in the business methods which now are in common use. They think that a multitude of competitors in any trade is a safeguard to low prices. Yet these rivals find that passive cheapness brings little trade. Costly aggressiveness brings ten customers where cheap passivity secures one. Doubtless the public desire cheapness, but they are willing to pay dearly to those who aid them in the search. When dealers recognize these facts and organize their business on an aggressive basis, real cheapness becomes a thing of the past, and prices, in such a business, approximate what they would if it were controlled by a trust or an intelligent monopoly.

There are, then, good reasons why we should think of the tendencies of wasteful competition towards higher prices as having the same results upon prices, and following the same laws that monoplies do. When we wish to ascertain the effects of present economic conditions we will arrive much more nearly the truth if we think of a multitude of our industries and trades as monoplies than if we adhere to the old hypothesis that an intense competition in them brings cheapness. The law of monopoly governs the price of drugs just as much as it does of sugar. The retail price has no more tendency to conform to the lowest cost of their production than the price of sugar does, under the present trust. The difference is merely that in the latter case the increased price passes into the hands of the refiners, while in the former it is wasted by the large number of persons who get a living by handling and distributing them.

The public think that aggressive competition brings them cheap goods, because they assume that the reduction of price is a necessary result of the action of self interest in the sellers. But the action of self interest may lead a dealer to attract trade by expensive means as well as by mere cheapness. In which way his self interest will prompt him to act is determined not by himself but by the social condition of the people with which he deals. If the people are easily misled and their standard of living does not require all their productive power, aggressive action on the part of the dealer counts for more than mere cheapness. The real limit of the upward movement of prices is fixed by the action of buyers and not of sellers. Prices cease to rise at that point above which the demand of the public would rapidly fall off. For this reason the upper limit of prices is the same for aggressive competition as for intelligent monopoly. The increased net revenue is the controlling motive of both competing sellers and monopolies. The price is fixed by that buyer who, if he ceased to buy, would reduce the net revenue of the seller.

It should also be noticed that this point of view coincides with the newer doctrines of value which are now receiving so much attention. The old view that value depends upon cost of production supposes that the seller and not the buyer fixes the price. When, however, later writers say that value depends upon the final degree of utility the cause of the price of commodities is sought in the mental state of the buyers and not of the sellers. Carry the reasoning of the newer doctrine a little farther than has thus far been done, and the law of prices for competition becomes a species of the same general law that operates in the case of monopolies. By accepting the doctrine that prices are fixed by the buyers, the logic of the situation requires an economist to put prices fixed by aggressive competition as governed by the law of intelligent monopoly. Both the wasteful competition of sellers and the interest of a monopoly tend to raise prices to as high a point as possible. The action of the buyers sets a limit to the rise of price and becomes the controlling element in its determination.

The popular notion that a great fall in prices has followed improved production is based upon wholesale prices and not as a sound opinion should be upon retail prices. In many cases a fall in wholesale prices has been accompanied by a rise in retail prices. The recent investigation of the Labor Bureau of Connecticut (1888) is of especial importance upon this topic. It shows that the retail prices of the leading articles of the food supply—forming at least a half of the expenses of the average family—have since 1860 greatly increased. It would seem that rapid transit would reduce the price of butter, yet, in fact, its price has risen forty per cent. Even flour has increased in price twenty per cent. in spite of the great reduction in the cost of transportation. With such tendencies at work ought we still call competition a success and rely upon it to distribute the benefits of the increase of productive power among those engaged in production?

Nor do the actual prices of articles fixed by competition show any less difference between cost of production and retail price than do those controlled by trusts or combinations. The public have a very mistaken notion of the power of monopolies to raise prices, and at the same time do not realize the distance by which the cost to the public is separated from the cost of production of those articles whose prices are fixed by competition. The most successful monopolies like the Standard Oil Company and the Whiskey Trust have not been able to raise prices at all. They get their large profits through the saving of waste which competition caused. Even the sugar trust has not been able to keep the retail price more than forty per cent. above the cost of production, and it is not likely that this price can be long maintained. Yet there is a multitude of articles whose prices are controlled by competition with a far greater difference between the cost to the public and to producers. Coal in this city has the two costs as far apart. Milk costing the farmer three cents a quart, sells at our doors for seven. The cheese for which we pay fifteen cents a pound does not bring the maker more than six. Tea and coffee where competition seems especially fierce, get as much added to their first cost as to sugar. Our farmers would be very thankful if their machinery could be obtained by as little addition to first cost as to sugar, and yet there is no end of rival firms advertising largely, and sending out agents to help them find the cheapest. Our gardeners would also be pleased with a like result when buying their seeds, and still a throng of traveling agents scour the land competing for their trade. A multitude of such cases arouses but little interest, yet the public is shocked at the first appearance of a trust through which they lose a much smaller sum.

That competition can result in dearness rather than in cheapness is the outcome of our present economic conditions. The necessary elements in the cost of production are wages and interest. Prices cannot, for any length of time, fall so low that wages will be below the standard of life of the workmen, or interest below the customary rate. If the productive power of the nation was just equal to the sum needed for the payment of the necessary wages and interest there would be no surplus revenue for any monopoly to absorb. The upper and lower limit of prices would coincide and no fluctuation in prices would be possible. This state of affairs prevailed in earlier times before the division of labor and improved machinery came into general use. During the present age, however, the standard of life of the general public has not risen as rapidly as the great improvements in production would allow. Interest and wages no longer equal the whole productive power of the community. After these shares are deducted from the whole produce, there remains a large surplus revenue which passes into other hands. It is the presence of this surplus revenue that allows the rise in prices above the necessary cost of production. The possibility of higher prices encourages waste and make trusts and combinations a possibility, and the united result of the struggles of the different producers and dealers is to force prices up to that upper limit beyond which the public would reduce the quantity purchased. When we know the relation of the standard of life of the public to its productive power, the whole amount of the surplus revenue, which waste and combinations can absorb, becomes fixed, though its distribution among the various claimants may not be known. When this party or that increases its advantage, it secures a greater share, yet as the whole surplus revenue is a limited sum the greater success of one party is at the expense of its rivals rather than of the general public whose revenue is fixed by their standard of living.*

It has been necessary to discuss as fully as I have done the whole subject of monopolies and the limits to their power of influencing the distribution of wealth, so that the direction along which the benefits of improved production are diffused may be clearly seen. The key to solving the problems of taxation lies in tracing the results of improved production into the hands of those who consume them. The burden of taxation falls upon those who profit by the increase of productive power. In other words, the line along which the benefits of improvements flow is the line of least resistence in taxation. This statement doubtless seems odd yet I hope to make its truth manifest.

It has been shown that monopolies, or of a system of waste, affect prices by raising the price of commodities to the upper limit

* See "Stability of Prices," page 44.

above which the public will cease to purchase, or at least reduce its purchases to such an extent that the net revenue of the monopoly will be reduced. If such a monopoly is taxed how can it shift the burden on the public? It cannot raise prices to a higher level without reducing its net revenue. As the price of its goods cannot be raised, the burden of taxation will fall upon it and cannot be shifted to other parties. The sugar trust for example, now asks for sugar all the public will pay. A greater price would not add to their profits. In what way then could they avoid the burden of a tax if it were demanded of them by the government? Nor would an industry where prices were raised by a system of waste be in any better position. The results of costly aggressiveness in the search for customers have already pushed prices to their upper limit. If the public were willing to pay more for goods a greater aggressiveness among dealers would have already forced prices higher than they are. The rivals in such an industry have no power to shift their taxes upon the public because the limit above which prices cannot go, has already been reached. To pay the increased taxation they must cut off some of the waste resulting from their own action and the public get the benefit of the increased taxation without any cost to themselves. And the possessors of rent are equally powerless to avoid taxation. From the time of Ricardo most, if not all, economists have assented to his doctrine that a tax on rent cannot be transferred to the consumers of agricultural produce. The differences of situation and fertility upon which rents depend, determine the rent of each tract of land, and its rent cannot be increased unless poorer land is brought into cultivation. The value of city and town lots is determined by their situation and until the growth of population demands the use of less advantageous situations the rent of such lots cannot be raised. Taxes on rent therefore form no exception to the general rule applying to other monopolies. The owners of land share in the increase of return due to improvements and from this growing return they must pay the taxes which society places upon them.

All natural monopolies arise from some advantage one class of producers has over others in the same occupation, or from the advantage one mode of conducting business has over all other modes. The advantage of good land is measured by comparing it with poor land ; the advantage of a store on a fashionable street by the disinclination of the people to go out of their way into back streets to make their purchases ; the advantage of advertising by the reduced effort the public makes in finding what they want, by the strength of their curiosity and by their love for the new, while the advantage of the neighboring store equals the effort needed to reach some larger center of trade. In short if we could find a store whose owner neither advertised or sought for trade in any other way, but who sold his goods at a slight advance on what he paid for them, we should have a measure to fix the advantage of all other dealers who resort to the present expensive means of attracting trade. If more than the value of these advantages were asked for them by dealers, the people would resort to more primitive methods of commerce. On the other hand the interests of the dealers coupled with waste of their rivalry cause the public to pay the full value of these advantages.

These conditions make it necessary for the purposes of taxation to divide the different portions of the whole community into two classes—those protected from competition by some natural advantage and those who compete on equal footing with every one who has the same productive capacity. All who must compete in the open market are one class in regard to the return for labor of those who make the same effort. Their shares in the final distribution tend towards a minimum equal to their standard of life. This tendency towards a minimum is the result of the conditions of their environment which make their numbers so numerous or their industrial qualities of such a nature that the present industrial world will not give them a higher return for their productive efforts. The crushing tendencies of competition have their source in conditions so fundamental that organized society cannot counteract, or to any extent modify them. Human nature itself must be developed and its leading characteristics brought into a greater harmony before competition will cease to be accompanied by its present evils. So long as the desire for the economic welfare of society cannot hold in check the feelings and passions inherited from earlier times, competition will take from the competing man all that it can, instead of giving him all that it could. So long as the opportunities for labor are mainly due to natural conditions or to the individual efforts of a few persons of superior ability, the competition of the public for these places will reduce the return for their efforts to as low a point as the general social condition of the nation will allow. Men in whom the qualities, needed for industrial success, are not developed cannot create enough new opportunities for labor where the return is high to employ the whole population ; and where a part of the workers must resort to opportunities for labor when the return is low, competition takes from those who utilize the better opportunities for labor all the advantage they possess above the return of those utilizing the poorest opportunities for labor. Competition is always crushing so long as a part of the workers cannot find employment under advantageous circumstances.

If then it be asked why a competing man does not get a greater reward for his labor, the reply must be that the whole population cannot find employment in opportunities for labor with a higher return than he gets. On the other hand, if it be asked why his reward is as high as it is, the reply must be that under the present social conditions the population would not increase if the return were reduced ; and without the necessity of resorting to poorer opportunities for labor through an increase of population the return for labor cannot be reduced. In this way the whole economic environment is the source of the prevailing reward secured through competition and it cannot be altered without some fundamental change in society.

With this conception of the causes fixing the reward of the competing man as a basis, let us examine into the burden of taxation by which so many economists think he is oppressed. If we could suppose that the only pressure upon the income of such a man came from taxation, we might suppose that this burden would have some effect upon his condition. But this supposition does not conform to the facts. Some pressure from competition is always present so long as there are differences in the opportunities for labor which society utilizes, and it would have been greater without any taxation if the present pressure did not prevent a more rapid increase of population than of opportunities for labor. New taxes cannot permanently add any thing to the pressure of competition, because population and opportunities for labor are already so adjusted that a greater pressure would make the rate of increase of population slower than that of opportunities for labor; and as a result of its reduced rate of increase the return for labor would rise, not fall.

Notice that in my argument there is no assumption that the individuals of each competing group have the same industrial qualities, and an equal power to resist the pressure of competition. I make no use of the economic man of the older economists. The greater part of the workmen in a trade may be unable to resist an increased pressure from competition, yet if a necessary part of the workmen has that power, the wages of all the workmen will be kept from falling. Wages are fixed by the most costly part of the labor needed to produce the quantity of goods needed by the public. Until the increase of the lower class of workmen entirely drive the better workmen out of a trade the lower class get the pay of the better workmen, as a result of the same law which gives the American silver dollar the value of a gold one.

The pressure of steam upon a boiler is a good illustration of the pressure of competition upon wages. All over the boiler except at the safety valve, the pressure of the steam might be increased. This one point, however, limits the pressure of steam to a given quantity. Any additional heat finds an escape through the valve without adding to the pressure of the steam. Certain individuals are to the men of their class what the safety valve is to the boiler. They prevent any additional pressure from competition and thus fix the wages of their fellows.

Notice again that there is no assumption on my part of the perfect mobility of capital and labor. A nation may be divided into many non-competing groups, yet the individuals of each group have a pressure upon them equal to the difference between the best and poorest opportunities for labor of which they make use; and there is also of necessity an adjustment which will equalize the increase of population and the number of opportunities for labor. Each group has without taxation as great a pressure from competition as existing conditions will allow and to which taxation can add nothing unless the whole industrial structure is changed. My theory might be called the full pressure theory of taxation, because it assumes that the general economic conditions of society press as heavily upon the individuals of each group as it is possible, under existing conditions, to do; and any added pressure finds some escape without increasing this pressure. Each group has a safety valve in its standard of life which fixes a limit to the crushing pressure of competition.* The gross amount of taxation, which a nation can pay, reaches its limit before the standard of life is affected. Any tax laid upon persons getting no more than their standard of life must be shifted upon other parties or the national prosperity will be so reduced that the tax can add nothing to public revenues and thus defeat its own end.

For these reasons the one class not protected from competition is subjected to the full pressure of competition, while the other class protected from competition will get all the surplus above the cost of living. The prices of articles produced by the first class will remain at the lowest limit to which prices can fall, while that of articles produced by the second class, tend to rise to the upper limit of prices and this allows them to absorb the gains from increased productive power. Under these conditions the burden of taxation must fall upon the second class. This class cannot raise the prices of the articles it produces because the price is already as high as it can go. The first class, however, can shift the burden of taxation because they are subjected to as much pressure upon their incomes as existing social conditions will allow. A tax must, therefore, raise the price of articles produced by laborers not protected from competition, but cannot change the price of articles produced by any monopoly. So long as the whole burden of taxation is not greater than the surplus revenue which either passes into the hands of monopolies, or is wasted by the endeavor of dealers to supplant each other, this burden falls upon the par-

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* See page 51 of my "Consumption of Wealth," (No. 4 of this series)

ticipants in the gains of the monopolies or upon those who waste national resources in useless competition. The same causes which give the results of improved processes to the industrial classes protected from competition, force them to give up a part of these gains when a tax is levied. In other words the line along which the benefits of improved production flows is the line of least resistance in taxation and hence indicates where the burden of taxation rests.

It is plain to be seen that this theory of taxation comes in direct conflict with the popular opinion upon the subject. A wrong notion of the power of monopolies strengthens the opinion that they can always escape taxation by an increase in the price of the articles they produce. At the same time inherited prejudices against all taxation lead the public to imagine that they have no protection from the burden of taxation. This feeling is so strong that it prevents the introduction of a rational system of taxation, and even makes difficult any discussion pointing in that direction. Yet as economic theory has often in the past come in conflict with popular opinion and finally conquered it, so in this case there is hope that its clear presentation may not be without some influence for the good.

Assuming this theory of taxation to have some degree of truth, the question naturally arises what application can be made of it in forming a better system of taxation. A theory is of little value if it does not furnish a guide to the solution of some practical difficulties. Of course in the application of this theory to practice it must be modified by the many conflicting causes which become prominent in the world about us, yet the leading characteristics of the new system of taxation ought to become manifest from the development of the theory alone.

At this time I wish to make two applications of this theory. First, taxation may be so placed as to give a greater stability of prices for articles which have lost the natural conditions which make prices stable ;* and such taxes will not be a burden upon the public. At the bottom, the cause of the instability of prices in many of our leading industries lies in the present rela-

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* See "Stability of Prices," page 5.

tion of production to consumption. As soon as the price of an article sinks below the cost of production of any producer the quantity of the article produced is reduced. At each additional fall in the price other producers will be affected, and at last the reduction of the quantity produced will be so great that prices cannot sink any farther. There is thus a lower limit to the fluctuation of prices caused by the gradual withdrawal of the articles from the market through the action of producers. On the other hand when prices rise, it is the action of consumers which fixes a limit above which prices cannot go. With each increase of price some consumer ceases to buy or at least reduces his consumption of the article, until at last the demand is so small that any further rise in price will not add to the net profit of the seller.

Influenced by these conditions prices will be stable if the price below which the production of an article would be seriously checked, is the same as the price above which the consumption would rapidly fall off; suppose if the price of sugar fell below six cents, a much smaller quantity of sugar would be put upon the market by producers, while if the price rose above six cents the consumption of sugar would rapidly diminish. Under these conditions the price of sugar would be stable since it could not rise or fall without affecting consumption or production in such a way as to bring the price back to six cents. Suppose, however, that the production of sugar would not be greatly reduced unless the price fell below five cents, while the consumption of sugar would not be materially affected until the price rose to seven cents. Now there is a margin of fluctuation between five and seven cents within which the action of the producers and consumers would not determine the movement of the price. There is merely an upper and lower limit of prices beyond which they cannot go, but within which other causes besides the legitimate action of production and consumption must come in to fix the price. The inability to foresee the course of future prices now turns industry into speculation and sets in operation many disturbing causes which retard the growth of industry and of capital.

If upon an industry suffering from unstable prices a tax be levied the stability of prices will be increased. In my illustration of sugar, if a tax of a cent a pound be levied, the action of producers in reducing production would begin when the price fell to six cents instead of at five cents, as would be the case if there were no tax. Fluctuations in price could not now exceed one cent as it could not fall below six nor rise above seven cents. If a tax of two cents were levied the price would be stable at seven cents, since any rise in price would affect the consumers while any fall in price would immediately act upon the producers.

There is no way that prices can be steadily kept at the lower margin of fluctuation of unstable prices, but a tax can hold prices firmly at the upper margin and thus free the industry from the evils of unstable prices. Such a tax would not be a burden upon producers or consumers since it merely absorbs a quantity of wealth which would go to speculators and to combinations, or be wasted by useless competition. It might even in the end be a source of public gain. With stable prices, the steady growth of industry would add much to the productive power of each individual, and the increased regularity in all productive enterprises would favor the growth of those qualities in men upon which national prosperity depends.

To secure a stability of prices through taxation, the taxes must be national. Such a tax upon the products of any one state would place its industries at a serious disadvantage without attaining the desired result. The increase, however, of national taxation is not an evil since in some way we must make a greater use of it if the revenue needed for local improvement is adequately supplied. Since the formation of our national government, the responsibilities of the local governments have increased much more rapidly than have those of the nation, yet at the same time the sources of local taxation have increased much more slowly. The necessity of public instruction, public parks, good roads, and better sanitation have increased enormously the burden of local taxation, while the increase of commerce and the intercourse between states and cities make local indirect taxation inadvisable if not impossible.

Local taxation in its present form has about reached its limit. Unless the nation comes in to aid localities in their development many of the most pressing responsibilities of local government cannot be met. The near future must see either a re-adjustment of duties between national and local authorities by which the nation will assume a share of the whole responsibility fully equal to its relative power of taxation, or it must aid in the development of localities by the distribution of revenue. In no other way can our government meet the just demands of our civilization, and be that power for good which its best citizens expect of it.

The other application of the theory of taxation has no constitutional difficulties in its way, still it runs counter to so many of our feelings and notions that it has many obstacles to its adoption. I have in the first part of this paper carefully pointed out the effect of waste in our retail trade. The tendency is no longer to seek custom by reducing prices, but to resort to many expensive methods of attracting trade. In this way retail prices have been gradually raised above the necessary cost of production until they are at the upper limit, beyond which the public would reduce their demand for its commodities offered for sale. If a tax were levied upon retail dealers they could not raise their prices because they now ask all that the public will give. By taxing them they would be compelled to economize the waste now lost in their rivalry for customers. Less rents would be paid for attractive locations; less advertising used to divert trade from others to themselves and a smaller number of petty dealers would be found scattered throughout each community wherever they can gain a foot-hold. If one-half the small stores in the city were closed, not only would the community save the rent on one-half the stores, but the rent of the other half would be greatly reduced. There would be but little need to advertise as all the existing stores would have a paying business. The stock of goods carried by the whole trade would be greatly reduced, without affecting its variety, from which there would be a great saving of capital. Perhaps the greatest saving of all would arise from the reduction of the force of salesmen, and from the reduction in the cost of delivering goods. Think of all these elements of economy in conjunction and an idea can be formed of the amount of taxes that could be levied upon retail dealers without raising the price of goods or putting the public to any inconvenience.

We are at the present time fortunate enough to have a good example of the effects of shutting out competition by a reduction of the competitors in a business. I refer to the effect of the high license movement upon saloons and their business. There are now many states and cities which have a high license, but I have never heard of an instance where it resulted in a higher price of liquors. And the reason is plain. Under the old system, competition did not tend to lower prices. It merely enabled a greater number of persons to get a living out of the liquor trade. Through the high license the public is enabled to secure to itself, without any cost, a revenue which before had been wasted by competition.

Should the public act in the same way toward the milk trade the like result would follow. A tax high enough to drive out a half of our dealers of milk would not raise the price of milk. The useless duplication of stock, wagons and drivers would be spared. Instead of having a dozen milk wagons drive by each door every morning the choice would be limited to half that number, yet the large trade which they could secure would enable them to give better milk for the same money. I have often thought that if there was a trade in the city where a monopoly would be a public benefit, the milk business was that one. Could an intelligent trust be formed, they would find it to their interest to lower, not to raise the price of milk. The public would get as much benefit from a half dozen firms competing to carry the mail as they do from having a dozen milk wagons pass each door, competing to deliver milk.

Perhaps the next best illustration of the waste of competition is in the retail drug trade. Certainly if there is an article about which the average man hesitates as to whether the purchase will pay him, it is his medicine. The immense number of useless drug stores not only doubles the necessary cost of each article but it reduces the variety and freshness of the stock in a way most detrimental to the efficiency of the medicines.

The same duplication of stock, the growth of rents and the useless increase of salesmen are to be seen in every branch of the retail trade. Our meat, eggs, butter and groceries are not as fresh as they might be, if the dealers in these articles were half their present number. The quiet of our resident streets is disturbed by the rumble of useless wheels used in delivering goods and by the persistent efforts of hucksters to dispose of their wares. At every turn ugly advertisements obtrude themselves into our view and destroy the beauty of our streets. In every household expenditure, we face some useless waste forced upon us by the costly aggressiveness of those who supply our daily wants.

Without a complete social reorganization we cannot stop waste and secure low prices. We can, however, by judicious taxation of retail trade put into the public treasury a large part of the present waste. A high license imposed upon retail stores would close a large part of the useless stores and force the remaining dealers into more economical methods of business and largely reduce their rents and number of salesmen. The reduction of cost and increase of trade would give them higher profits and still enable them to serve their customers better and to reduce prices.

Picture our city as it might be if the present productive power of its people were used to a better advantage. Suppose the brick and labor used to build a half of our stores had been used to extend and enlarge our sewers. Suppose three-fourths the men and horses now wearing out our streets by delivering goods were put to work improving them. Suppose the larger part of the space now occupied by our stores were turned into public parks and the men employed in them were set to work beautifying these parks, building school houses or digging a canal by which pure water might flow into the city. Suppose the men engaged in printing and distributing the great mass of present advertising, were employed in furnishing the public and especially our school children with cheaper books. Suppose all these and many other needed improvements were made, could any one say that the whole labor performed by the citizens of our city would be any greater than the present system of aggressive competition requires of them? Are all the extra persons required by our stores any less tired when night comes than if they were employed in making the city more useful and beautiful to its inhabitants. Would not the unnecessary capital now absorbed in business and in buildings be fully sufficient to furnish us with pure water, lovely parks, fine art galleries and a perfectly equipped system of schools?

We do not fail to secure these desired objects because of any lack of productive power of our citizens. There has been a marvelous increase of productive power during the present age. Enough men have been set free from our progressive industries to have secured all of the much needed improvements in the city. The trouble is it has not been so applied. The growth of waste has almost kept pace with the increase of productive power. Instead of any organized effort of the public to use this increase of productive power in an efficient way, it has passively looked on while the action of individual self-interest has forced the increased productive power into channels bringing but little return to the public. Is it not time for this passive neglect of public interest to cease? Can we not by a more rational view of taxation bring into use a new system which will secure a greater share of the results of improved production for public purposes? Certainly the need of more revenue is so urgent that we ought to seek light in any quarter even though a few of our old feelings must be conquered before getting into the light.

THE FOLLOWING IS A LIST OF THE PAPERS READ BEFORE THE ASSOCIATION.

Those Marked * out of Print. † Not Printed.

1871. *Compulsory Education.* By Lorin Blodget. *
Arbitration as a Remedy for Strikes. By Eckley B. Coxe. *
The Revised Statutes of Pennsylvania. By R. C. McMurtrie. *
Local Taxation. By Thomas Cochran. *
Infant Mortality. By Dr. J. S. Parry.
1872. *Statute Law and Common Law, and the Proposed Revision in Pennsylvania.* By E. Spencer Miller. †
Apprenticeship. By James S. Whitney.
The Proposed Amendments to the Constitution of Pennsylvania. By Francis Jordan.
Vaccination. By Dr. J. S. Parry. *
The Census. By Lorin Blodget. *
1873. *The Tax System of Pennsylvania.* By Cyrus Elder. *
The Work of the Constitutional Convention. By A. Sydney Biddle.
What shall Philadelphia do with its Paupers? By Dr. Isaac Ray.
Proportional Representation. By S. Dana Horton. *
Statistics Relating to the Births, Deaths, Marriages, etc., in Philadelphia. By John Stockton-Hough, M. D.
On the Value of Real Scientific Research. By Dr. Ruschenberger.
On the Relative Influence of City and Country Life, on Morality, Health, Fecundity, Longevity and Mortality. By John Stockton-Hough, M. D.
1874. *The Public School System of Philadelphia.* By James S. Whitney.
The Utility of Government Geological Surveys. Professor J. P. Lesley.
The Law of Partnership. By J. G. Rosengarten. *
Methods of Valuation of Real Estate for Taxation. By Thomas Cochran.
The Merits of Cremation. By Persifor Frazer, Jr.
Outlines of Penology. By Joseph R. Chandler.
1875. *Brain Disease and Modern Living.* By Dr. Isaac Ray. †
Hygiene of the Eye, Considered with Reference to the Children in our Schools. By Dr. F. D. Castle.
The Relative Morals of City and Country. By William S. Pierce.
Silk Culture and Home Industry. By Dr. Samuel Chamberlaine.
Mind Reading, etc. By Persifor Frazer, Jr.
Legal Status of Married Women in Pennsylvania. By N. D. Miller.
The Revised Status of the United States. By Lorin Blodget.
1876. *Training Nurses for the Sick.* By John H. Packard, M. D.
The Advantages of the Co-operative Feature of Building Associations. By Edmund Wrigley.
The Operations of our Building Associations. By Joseph I. Doran.
Wisdom in Charity. By Rev. Charles G. Ames. *
1877. *Free Coinage and a Self-Adjusting Ratio.* By Thomas Balch.
Building Systems for Great Cities. By Lorin Blodget.
Metric System. By Persifor Frazer, Jr.
1878. *Cause and Cure of Hard Times.* By R. J. Wright.
House-Drainage and Sewerage. By George E. Waring, Jr.
A Plea for a State Board of Health. By Benjamin Lee, M. D.
The Germ Theory of Disease, and its Present Bearing upon Public and Personal Hygiene. By Joseph G. Richardson, M. D.
1879. *Delusive Methods of Municipal Financiering.* By William F. Ford. †
Technical Education. By A. C. Rembaugh, M. D.
The English Methods of Legislation Compared with the American. By S. Sterne.

1879. *Thoughts on the Labor Question.* By Rev. D. O. Kellogg.
On the Isolation of Persons in Hospitals for the Insane. By Dr. Isaac Ray.
Notes on Reform Schools. By J. G. Rosengarten. *
1880. *Philadelphia Charity Organization.* By Rev. Wm. H. Hodge.
Public Schools in their Relations to the Community. By James S. Whitney.
Industrial and Decorative Art in Public Schools. By Charles G. Leland.
Penal and Reformatory Institutions. By J. G. Rosengarten.
1881. *Nominations for Public Office.* By Mayer Sulzberger.
Modelling for the Study of Human Character. By Edward A. Spring. †
1882. *Municipal Government.* By John C. Bullitt.
Result of Art Education in Schools. By Chas. G. Leland.
Apprenticeship at it Was and Is. By Addison B. Burk.
1883. *The American Aristocracy.* By Lincoln L. Eyre.
A Plea for a New City Hospital. By Thomas W. Barlow.
Some Practical Aims on School Hygiene. By Dr. Lincoln. †
The Pending School Problems. By Professor M. B. Snyder.
Municipal Government. By Wm. Righter Fisher.
Social Condition of the Industrial Classes. By Lorin Blodget.
1884. *Progress of Industrial Education.* By Phillip C. Garrett.
A Plea for Better Distribution. By Charles M. DuPuy.
Formation of Public Libraries in Philadelphia. By Lloyd P. Smith. †
Best Means of Regaining Health. By Dr. Walters. †
Milk Supplies of our Large Cities, etc., etc. By J. Cheston Morris, M. D.
1885. *Alcoholism.* By A. C. Rembaugh, M. D.
Sanitary Reforms in Large Cities. By Dr. Leffmann. †
Sanitary Influence of Forest Growth. Dr. J. M. Anders.
Outline of a Proposed School of Political and Social Science. By Edmund J. James, Ph. D.
1886. *The Organization of Local Boards of Health in Pennsylvania.* By Benj. Lee, A. M., M. D., Ph. D.
Manual Training a Valuable Feature in General Education. By C. M. Woodward, Ph. D.
The Gas Question in Philadelphia. By Edmund J. James, Ph. D.
Trade Dollars: The President's Power, etc., etc. By Dr. James C. Hallock.
The Balance of Power between Industrial and Intellectual Work. By Miss M. M. Cohen.
Wife Beating as a Crime, and its Relation to Taxation. By Hon. Robert Adams, Jr.
Defeat of Party Despotism. By Rev. Dr. Leonard W. Bacon. †
Land and Individualism. By Kemper Bocock. †
1887. *Chairs of Pedagogics in our Universities.* By Edmund J. James, Ph. D.
1888. *Journalists: Born or Made.* By Eugene M. Camp.
1889. *Industrial Education in Europe.* By L. W. Miller.
Concerning Trusts. By Prof. Robert Ellis Thompson.
Ballot Reform Essential to Free and Equal Elections. By Chas. C. Binney.
Indians of Alaska. By William Righter Fisher.
Methods of Rational Taxation. By Simon N. Patten, Ph. D.
Prison Reform. By Hon. Francis Wayland, LL. D.