

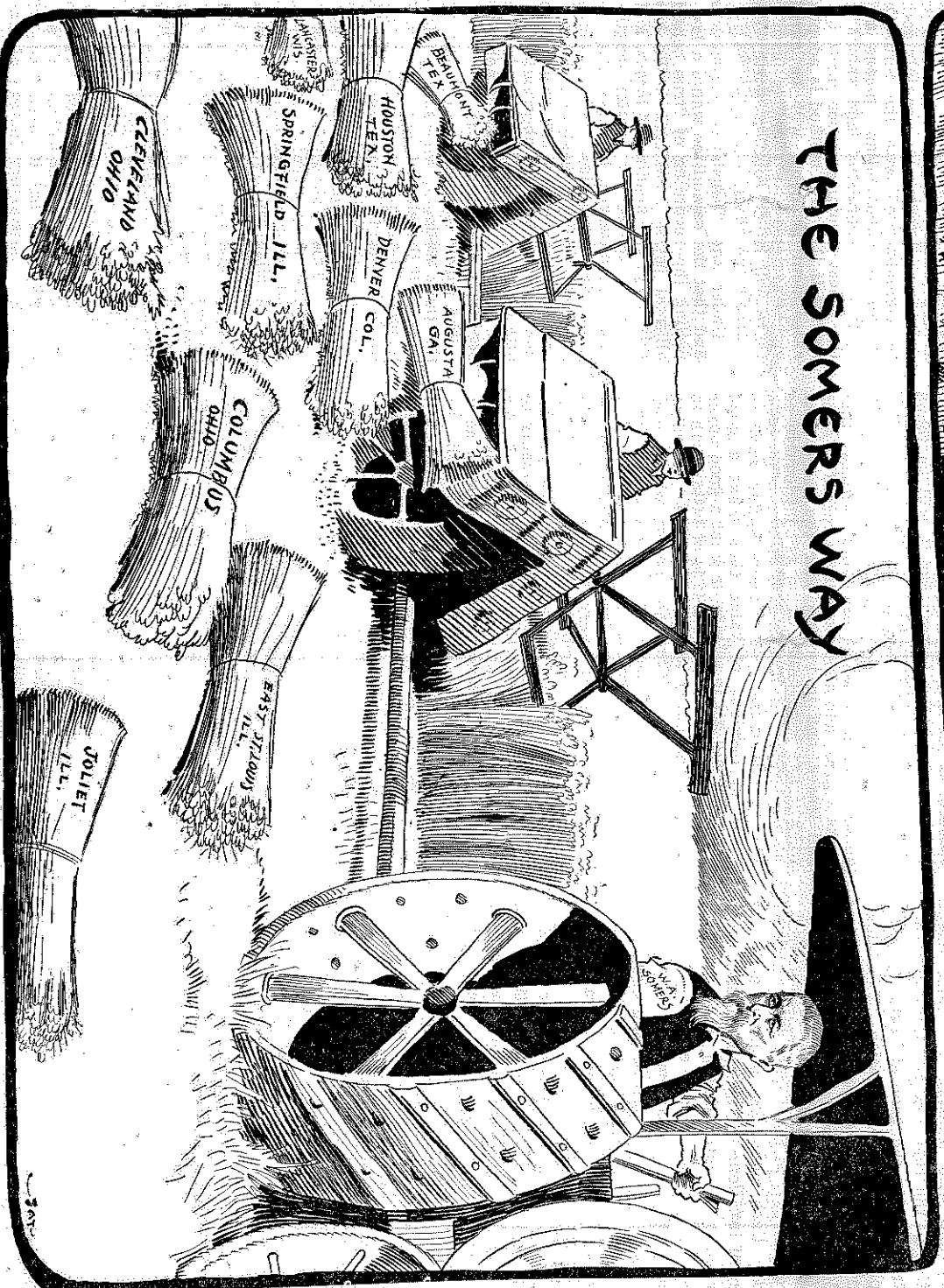
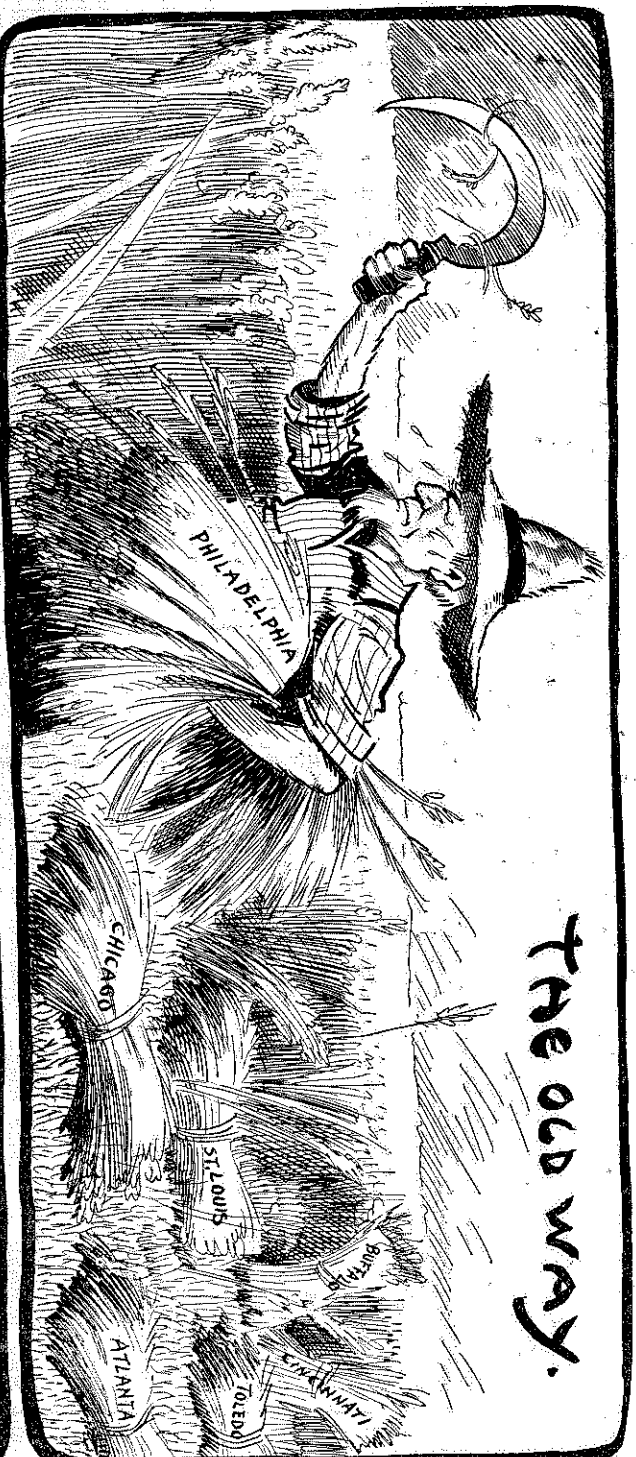
THE SOMERS SYSTEM NEWS

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A COMPARISON OF TAX ASSESSMENT METHODS

Real Property in Ten American Cities Has Been Assessed by the Somers System
With Equitable Results--Other Cities Have Inequitable Valuations.

Official Report on Washington Values Makes Some Impractical Suggestions

On August 20, 1912, Congressman Henry George, Jr., member of the House District of Columbia Committee, made a notable report on "Assessment and Taxation of Real Estate in the District of Columbia." This document has been published by the Government and is Report No. 1215. About a year ago Mr. George prevailed upon the District Committee (which is really one of the City Councils of Washington), the Senate District Committee being the other, to investigate the subject of assessments and taxation in Washington and this report is the result.

As the title of the report would indicate, there are two divisions of the subject as treated by the Committee. The first 16 pages of the report are devoted to the assessment and the methods used, together with recommendations for the use of other methods. The remaining 24 pages are devoted to the economic side of the subject, discussing and illustrating the effect of the policy of taxation that the Assessors of Washington have foisted upon the people of the capital city. Probably no more carefully prepared statement of this phase of taxation in a large city was ever prepared. An investigation will show that practically every large city presents the same general policy and with probably the same effect. This portion of the report is a notable and valuable contribution to the general subject of the proper policy to pursue in taxation. The tables, facts and comments introduced in this second part of Mr. George's report are well worth the study of student and legislator.

It is the first part of this report with which we have to do. Each community ought to settle its own policy of taxation; but all communities, whatever their policy, are interested in proper methods of ascertaining the values that exist in city real estate, and the Somers System has only to do with the method of ascertaining and comparing values, and not with the part of the subject treated so exhaustively in the second part of this report.

The first 16 pages of this report after its introduction, summarizes its recommendations, and then follow "notes on recommendations" to which we desire to direct attention. These recommendations and the notes thereon present so confused a conception of what ought and what ought not to be done, that we consider it at least a duty to discuss them—especially when they are presented with so admirable a document as the last 24 pages of the report would make if published alone.

The recommendations are as follows:

Administrative—(1) Full value assessments; (2) the exercise by the assessor of his full powers for the adding of testimony relative to real estate values under oath; (3) the keeping by the assessor of a record of all important leases to aid in determining property values; (4) the publication of land-value maps and assessment sheets; (5) the establishment of a systematic method of equalizing land values; (6) the establishment of tables of building factors and deductions for determining the value of improvements; (7) the energetic prosecution of the legal requirement of reforming the lot numbers in squares; and (8) the consolidation of lots that are portions of single buildings.

Legislative—(1) Annual in place of triennial assessment of inside frontages after the assessments; (2) the repeal of the fixed tax rate of 1½ per cent, leaving the rate to be fixed annually by the requirements of the budget; (3) the recording of the true consideration in all real estate transfers; (4) the substitution of 12 field assessors for the 3 assistant assessors now on field work; (5) the abolition of the requirement for the assessors in the field personally and jointly to "view" each piece of property; (6) the creation of a board of appeals, from which the field assessors shall be excluded; (7) the power to be restored to the Commissioners to remove

the assessor or any of the assistant assessors for cause; (8) the divorcing of excise matters from the assessor's office; and (9) the establishment of an assessment roll and the transfer of the duty of making bills from the assessor's office to the office of tax collector.

There can be no doubt about the wisdom of some of these recommendations, and we shall discuss only those we believe open to criticism. Much stress is laid upon the "power to adduce testimony" relative to real values. Such power would be as ineffective to assist assessors in making a proper assessment as would be the power to walk upon the water. Sworn testimony for such a purpose is always biased testimony, and when obtained is generally but an exhibit of how far the witness is willing to go under oath. As an exhibit in agility of mind and conscience it would be interesting; as a method to get at unbiased opinion of value it would avail little, and is not worth the attempt. The city of Cleveland was assessed without putting any person under oath; so was Houston, Texas, so was Springfield, Ill., and so were all the other cities or parts of cities where the Somers System has been used. The "power to adduce testimony" will not solve any phase of the difficulty that this committee so aptly points out.

The recommendation that the assessor keep a record of all important leases to aid determining realty values appears to the uninformed as very important. That it could easily be done by the assessor is probably true. If such a record will help, so much the better; but it will be found that such a record is of so little real help in making an assessment that it would not be long unutilized, and is not worth special trouble to obtain. We have seen assessors' offices that make a great ado about keeping a record of sales and leases, and in looking over the assessment work it has been found to be as inadequate as the assessment of Washington or any other city. The fact is there are so many better ways to arrive at opinions of value than what a good salesman will get in a lease or what a good buyer will buy a city site for, that it is of little worth to encumber an office with the work of recording sales and leases. When any person who is concerned hears of a lease or a sale made by two other people, his first mental attitude toward the transaction is to appraise the transaction. If the consideration of every sale and lease in Washington were accurately recorded—which would happen under no sort of a law yet devised—it would be necessary for the assessors to appraise each transaction before using it for valuation purposes, and it must be obvious that it ought to be as easy to appraise property as it is to appraise sales. Furthermore, it will be found in any large city that all of the sales and leases together do not affect 10 per cent of the sales of that city—probably never over 5 per cent in any one year. Therefore accurate knowledge of leases and sales would not solve very much of the problem. If the 5 or 10 per cent were scattered over the city they would help some; but they are not; some sections of a city do not have a transaction of this kind in five years. While other parts of a city show great activity. While the carrying out of this recommendation might help a trifle, it is scarcely worth the effort; that the carrying out of this recommendation would go very far toward solving the assessment problem is contradicted by every assessor's office that has for years carried such a scheme into effect.

"The publication of land-value maps and assessment sheets" is an important recommendation but the comment thereon shows that the committee did not have any well-defined idea as to how to use such maps. The report sets forth a land-value map from the New York City records. If land-value maps are to be used as they are in New York City, the results will not be much better than they are now in Washington. A higher gross value may be disclosed, but injustice will prevail as it does at the present moment in New York City. The New York map which is exhibited by this committee was not used in the making of the assessment; it is simply an exhibit of the assessment of inside frontages after the assessment was made. The proper time for the public to inspect these maps is before the assessment is made and not afterwards. While the New York map is shown in the report, no method

is given for using the unit values thereon set forth for ascertaining the enhancements at or near corners. The map used by the committee is a section of New York City surrounding Madison Square. Nearly every foot of the property included in this district, indeed every foot on Broadway and the other north and south streets, is affected by another influence than the street frontage influence itself. If the assessors of Washington were to map their whole town in the way shown by example, and place unit values on every block, they would be as helpless to use what they would then have as they are charged by the committee with being under the present plan of assessment work. In comment upon this map the committee recommends that unit foot values ought to be placed for corners and for inside property. This is a mental task that no man has yet found himself able to perform; the assessors of Toledo are the only ones we have observed attempting so absurd a rule as that, and their assessment was about forty millions less than it ought to have been, and largely traceable to this attempt. The recommendation to use land-value maps is sound; the seeming recommendation to use them as the assessing department of New York does would be barren of equitable results.

"The establishment of a systematic method of equalizing land values." What this probably means is that there ought to be some way to equalize after the assessment is made. If that is what it does mean, it will never solve a single problem of the assessment. In all this broad land it has never happened once that the so-called function called "equalization" ever equalized anything. It may lower some one's property value, but as for equalization, it never happened that way. There is just one time to equalize property values, and that is when the assessment is made. Nothing but the correction of clerical errors in descriptions and computations is in the true sense possible, after values are determined; certainly nothing that can be complimented with the term "equalization." If this recommendation means a "systematic method of appraising land values," it would be the wisest recommendation made by the committee for if the right method is adopted, all of the assessment problems will be solved; until the right "systematic system" is installed and used, there will be no solution worthy the name, and scarcely the effort.

Under the "legislative recommendations" we find that the committee wants a law passed compelling the recording of "true considerations" in all real estate transfers. We have discussed this under the heading of leases, and it need not be discussed at any greater length perhaps. It might be observed, however, that the committee would find some difficulty in framing a law that could not be easily beaten; it is only fair to say, however, that such a law would be observed by most people, but our observation in more than fifty cities in the United States is to the effect that the passage of such a law is not worth the effort necessary even to draft it.

The substitution of twelve field assessors for the three assistant assessors would be very unwise until the plan of doing the work is adopted. It might develop that the twelve and the three would be just that many too many. Assistant assessors will produce about as much confusion of thought and action as any plan that can be devised. This is shown in New York City, where they have about seventy each a law unto himself, and each working regardless of any other assessor. A slight analysis of any assessment district ought to show anyone that it is one problem in itself, and that it ought to be solved by one judgment instead of by many—if such a plan of operation could be devised. The City of Cleveland, with 600,000 people, was judged by one judgment, the combined judgment of five men working at all times in concert and not separately; the same is true in Columbus, Ohio. In Springfield and East St. Louis, one judgment and that of one man in each city, was used. This recommendation of the committee will not only not solve any of the difficulties, but if carried out will make results less satisfactory instead of more.

The creation of a Board of Appeals—probably meant for "equalization" purposes—has already been discussed. Such a Board would be superfluous, and contribute nothing to the solution of present difficulties—the tendency would be to increase the difficulties.

The confusion of thought that we have attempted to show in the foregoing discussion of this lack of analysis of the work to be done, it is apparent that the mind of the Committee, or the person drawing the report was turned toward New York City rather than centered upon an original analysis of the situation and what it demanded.

Universally Uniform Judgment Possible When Somers Principles Applied

Valuation of property for the purpose of taxation, as viewed from any point of view, has presented almost unaccountable difficulties. To cure the inequalities which arise from these difficulties has been the mission of countless investigations; and the proposed remedies are found to be at best mere palliatives. States have sought to "equalize" the valuations of assessors in a blind attempt to cure the results of assessment work that has been based upon fundamentally wrong theories, lack of system and inexperience. That none of these efforts has cured, is well known to every investigator of the subject, and a loud cry goes up in every state, every city, county and township, for some relief from existing conditions. The same troubles that are found in the state as a whole are known to exist in each separate taxing division. It is found that "equalization" does not equalize. It is found, even, that the selection of "good" men, or "competent" men to be assessors, does not cure the evil. It is probably true that the assessors and supervisors of assessments of any state, taken as a whole, average in intelligence, in honesty of purpose, in ambition and in integrity with the officials who are charged with the duties of other offices; but they do not and cannot under existing conditions accomplish desirable results.

Taking the state as a whole—and most of the same reasons will apply to any taxing division within itself—we find many reasons why the lack of equity and proportion in assessments exist, why in fact they should be expected to exist. In no other function of government is there the lack of improvement, the utter disregard of science, the lack of analysis, that appertains to the function of government that we call assessing property for tax purposes. While there may be some fundamental reason why the classes of property that we call "personal property" and "land" should show wide differences in the percentage of their true value taxed, there ought not to be the inequalities within the class known as "land" that exist in every city, township and county. Whatever the belief of any citizen as to the wisdom or lack of it of imposing a large or small portion of the tax of the State upon owners of land values, all will agree that whatever that portion is, it ought to be imposed with justice as between owners, and with justice as between communities. Yet this is not so. That it is, not so, requires no proof; it is a fact that is too well established to require specific evidence. And as long as the State imposes a larger portion of the burden upon owners of land values than on the owners of other property, as is the result in every State, no matter what its statutes and constitution stipulate, it behooves all of us to distribute that burden equitably, instead of in the ineffect and non-scientific manner in which it is now distributed.

Some of the fundamental reasons why inequalities exist among the owners of real estate in any State, may be summarized as follows:

1. There is a lack of common judgment in ascertaining values.
2. There is a lack of a common method of applying judgment, no matter how obtained.
3. There is no adequate basis for comparing the value of one lot with that of another; the value of one farm with that of another; the value of one city block with that of another; the value of one township with that of another; the value of one city with that of another; the value of one county with that of another; the value of one part of a state with that of another.
4. No clear idea of the origin of land value, especially in cities, exists in the minds of assessors.
5. No analysis of the factors that enter into the value of city sites is attempted.
6. While there is a general recognition of the law of comparative valuation, there is no method, or at best the very crudest methods, of carrying that law into effect; either by assessors, reviewing bodies or state tax commissions. When we come to appraising the values of buildings and structures, we find:
7. There is no classification of buildings, either as to use or construction.
8. There is no proper or uniform inventory of building construction.
9. There is no proper or uniform method of ascertaining reproductive cost.
10. There is no proper or uniform method of depreciating building values.

The lack of knowledge concerning any one of the foregoing conditions would tend to inequity in results; the lack of knowledge of some of them would prevent equity. The absence of specific knowledge concerning all of them is the fundamental cause of the inequities that bring into being this and all other investigations. Until the whole method of valuing property for tax purposes is changed, there will be no real relief. So far as equity in valuing real estate is concerned—which includes not only land and structures, but franchises—there is probably no need of any change in present laws, at least none ought, in our judgment, to be made until proper methods are used under present laws. Then it will probably be found that changes—except those that are from time to time based upon economic, rather than upon administrative reasons—will be few in number, and comparatively unimportant.

Let us look into the foregoing reasons, and ascertain if possible just how important a part each bears upon the problem in hand, and the possible solution under present laws:

1. THERE IS A LACK OF COMMON JUDGMENT IN ASCERTAINING VALUES.

Theoretically a taxing division and an assessing division ought to be co-extensive. This is possible in the smaller taxing divisions, such as the county, but in the absence of central direction by the State Tax Commission is impracticable so far as the State as a whole is concerned. To illustrate: There are 99 counties in a given State. Let us assume that one man in each county assesses all the land and buildings of that county for tax purposes. That means that 99 separate and distinct judgments are used in getting at the value of the real estate of the State. No two of these men can or will do their work in the same way; they will all use different standards; they will all view their tasks from different standpoints. They are of differing grades of ability and experience. Eliminating the effort that each will make to keep the valuation of his county as low as possible, it will be found that there will be 99 different kinds of assessments. And when the assessment has been made, the State will impose a level tax on the value thus ascertained, and if for no other than this one reason, there would be inequalities as between counties. Some counties would pay more of the State tax in proportion to the value of their property than would other counties. And when, coupled with this inevitable human tangle, is the desire to be mented by local environment, to "keep the assessment down," each one "keeping it down" to a level quite different from the others, the confusion of the resulting assessment is increased.

This same situation is found in a county where several assessors or deputies are charged with the work, each with a district comprising a part of the county. The levying of a level county tax upon the results of such work produces the same inequities as between various parts of the same taxing division, be it township, village, city or county.

So far as the State is concerned, it is manifestly impossible to exercise a common judgment, either through the judgment of one man or one set of men. Some other method of producing a common judgment, or as nearly a common judgment as is possible, must be devised. This can be accomplished through a State Tax Commission, with supervising powers as to uniformity of assessing rules; and to superintend the assessment while it is actually being made. It could well include definite instruction before the work of the local assessors begins, so that they would be guided by a common head. There ought to be a basis for an interchange of ideas and opinions of value in a manner that all can understand, while the assessment is in progress, so that farm lands should be assessed with relation to their comparative values; so that cities and each parcel of land in every city, should be assessed with regard to the individual and comparative values that experience shows they ought to have. No doubt, as this work would progress, many other methods of producing as nearly as possible a common judgment in every part of the State would arise and be applied, but these are perhaps the more important, or at least the more obvious. This program would place the property of the State upon a common level, so far as it would be possible to exercise a common judgment.

2. THERE IS LACK OF A COMMON METHOD OF APPLYING JUDGMENT, NO MATTER HOW OBTAINED.

The number of methods of applying judgment now equals the number of local assessors who work in any state. This is a situation that a State Tax Commission might cure. The local assessors would welcome assistance of this kind from a central authority. We find that they welcome it from unofficial persons who have no authority whatsoever over them. The local assessor is usually a man who has an ambition to do a good job of assessing; and anyone who can tell him something fundamental about his work is a very welcome visitor. How much more influence would the State Tax Commission have with the assessor if it should prescribe fundamental rules which he could use as tools in making his assessments uniform. And how much more uniformity there would be if all the local assessors would use the same method of applying their judgment. If the same method should be used in every part of the State, it would be easier for the Tax Commission to detect the inevitable difference in judgment, than it is now under present conditions, where differing judgments are applied in different ways.

While any assessor will be able to tell that 10 acres of land are worth \$1,000 if one acre is worth \$100, yet not many of them can tell how much a parcel of ground 10x124 feet in size is worth if they know how much a lot beside it 24x73 feet is worth. Not one of them can tell how much a lot at a corner is worth when an inside lot of the same size is worth \$10,000, on one side of the block and \$4,540 on the other side. Some assessors do not know the value of an alley, nor how to find out what that value is. Not one in a thousand knows how to compare the values of streets. And for these troubles, and many other difficulties, rules to be used by all the assessors could be promulgated by the State Tax Commission, so that assessors could do all of this work by a common method. And even though this method had some defects in it, it would be far better than the hither-to plan now in vogue. We would say that there is now no need of any defects existing in the rules for this part of the work of assessing, because the curing of such defects has been actually accomplished by W. A. Somers, and they can be accomplished everywhere.

3. THERE IS NO BASIS FOR COMPARING THE VALUE OF ONE LOT WITH ANOTHER; THE VALUE OF ONE FARM WITH ANOTHER; THE VALUE OF ONE CITY BLOCK WITH THAT OF ANOTHER; THE VALUE OF ONE TOWNSHIP WITH THAT OF ANOTHER; THE VALUE OF ONE CITY WITH THAT OF ANOTHER; THE VALUE OF ONE COUNTY WITH THAT OF ANOTHER; THE VALUE OF ONE PART OF THE STATE WITH THAT OF ANOTHER.

The lack of a basis for comparisons, that are always necessary in an assessment, is universal in every detail of the assessment. No one assessor can devise this basis or work it out. The assessment of property is one of comparison from start to finish. If all the property in a taxing district were sold every year at a fair price, and only at a fair price, the assessment would consist only in copying the sale records. Such a situation never arises, and never can arise. We must find some other method, and that method is simply refined comparison. Unless the assessor is by expert assistance shown how to make these comparisons, he can never make them accurately. The theory of some State laws, which provide that land shall be assessed "on view" is fundamentally wrong. Comparisons cannot be made "on view." There are so many conditions that affect the value of real estate that a "view" will not disclose them, nor make it possible to compare values. Mathematics substituted for the "on view" crudity will help amazingly.

Comparisons must begin where the knowledge is most extensive. Knowledge is most general where there is the greatest competition for the use of land—that is, in the highest valued streets in cities. And these comparisons must extend in every direction from the high-value center. The usefulness of streets must be ascertained, rather than of specific lots, for it is the usefulness of streets that gives value to the lots. In country districts both site and productive value of land must be ascertained, and should be known separately from improvements. Structures of all kinds, as well as tillage improvements on farms, ought to be separated from all other land values, and be valued as separate factors. In short, to secure equity, there must be an analytical study made, and its results worked out into practicable form by the local assessors.

Until this has been accomplished, there can be no comparison between property owners'

holdings on the same street, between blocks of the same city, between wards of the same city, between townships of the same or neighboring counties, between different cities, not between any two parts of the State. And all of this comparison is necessary to equity and justice. Boards of Equalization attempt to do this, but never accomplish it, because of their complete lack of understanding of the principles involved in the making of equitable assessments. The time to equalize values is when the assessment is made, and not afterwards. Equalization can never be accomplished, either during the assessment or afterwards, until there is some method of comparison worked out for practical application to all existing conditions. It is to the solution of this problem that Mr. Somers has given up more than 20 years of thought and study.

4. NO CLEAR IDEA OF THE ORIGIN OF LAND VALUES, ESPECIALLY IN CITIES, EXISTS IN THE MINDS OF ASSESSORS.

The solution of this difficulty is purely educational. Most assessors really know a good deal about the origin of land values, but have never thought it bore much relation to their own work. A clear idea of where land value, especially in cities, comes from, about how much in gross it ought to be for any center of population, the effect of competition for sites, how to ascertain what and how much that competition is, and how it fluctuates, ought to be clearly explained to assessors before they begin work. The city was laid out into blocks and streets for the convenience of its inhabitants, who in their daily life require land for homes, stores, factories, churches, schools and places of amusement. Not often are the original plans of the city builders followed. The people insist on their preferences concerning sites, and business men find themselves obliged to put their stores where the people will patronize them. The competition for such desirable sites has the effect of enhancing their value. The street is the means of accessibility to the sites, and under the Somers System it is possible to determine the relative and actual values of streets and their effect upon each block of ground. Units of value upon each street frontage are determined by the consensus of community opinion; such unit values showing the value reflected upon the block by each street accessibility. When the values of such units are agreed upon, the values of the various lot ownerships are computed in accordance with the size and shape of the different lots and their location with reference to the various streets. A lot in the center of a block may have only one street influence, while the lots at and near corners have two such influences, the combined effect of which creates an enhancement that may be computed mathematically.

5. NO ANALYSIS OF THE FACTORS THAT ENTER INTO THE VALUE OF CITY SITES IS ATTEMPTED.

Assessors are in the habit, as indeed are all of us, of looking at a lot in a city as one factor of value. This is shown in our laws, which provide that land and buildings shall be valued separately for tax purposes, the theory being evidently that in the case of a house and lot, there are two dissimilar factors of value, the house and the site upon which it stands. This separation of house from site is of course absolutely necessary to an intelligent assessment, but there are other factors that still remain in combination; there are three or more factors that affect the value of the site alone. Until assessors are shown how to separate the factors of value in the site, how to value each factor by itself, and how to combine these values so ascertained, there can be no proper comparison of site values in cities, where the greatest assessment problems exist. Assessors must know the laws of valuation of land, not in the groping way as they know them now, but so that they can express them; and when they can express such laws in words, they must be shown how to apply them, and not allowed to guess their application, as they are in the habit of doing now.

6. WHILE THERE IS A GENERAL RECOGNITION OF THE LAW OF COMPARATIVE VALUATION, THERE IS NO METHOD, OR AT BEST THE VERY CRUDEST METHODS, OF CARRYING THAT LAW INTO EFFECT EITHER BY ASSESSORS OR REVIEWING BODIES.

Let us state exactly and simply what the law of comparative valuation is:

There is a mathematical relation between the value of any two city sites that are affected by the same street influences.

There is probably no city assessor who does not recognize the existence of this law, although very few, if any, have expressed it in words. They all attempt to carry it out, but their only method of doing this is to guess in each case just what the mathematical relation is. Some

assessors know there is a relation, but because they have themselves been unable to reduce that relation to mathematics, they doubt the possibility of a mathematical solution of their many difficult problems. Anything that is mathematical ought to be solved by mathematics, and not by guessing. This does not refer at all to the exercise of judgment; it refers to the application of the effect of that judgment upon all the sites that are affected by street influence alike. Until assessors are furnished with some way of solving their problems by mathematics, they will be compelled to continue their guessing, and the results will be commensurate with the ability to guess the comparative values of varying sizes, shapes, and corner and alley enhancements. Any assessor who can guess right once in 100 times would be a prodigy; a correct guess is probably not made once in 1,000 times.

7. THERE IS NO CLASSIFICATION OF BUILDINGS EITHER AS TO USE OR CONSTRUCTION.

Rules for classifying buildings on farms or in cities can with comparative ease be devised by assessing officials. Some assessors make attempts at classification, but usually without regard for use, and sometimes without regard for construction. In most cases there is no attempt at classification at all. The assessor walks around a building and looks at it, finds out how much the owner pays it cost to build it at some time in the past, glances at a building across the street that he has just assessed in the same way, and makes a rough effort to estimate the value of the structure. If all the structures in the city of the same character of construction used for the same purpose were brought under one view, as it were, much greater uniformity could be attained. Whatever the method or absence of it, they would all be more likely to be treated alike than under the present complete lack of classification.

8. THERE IS NO PROPER OR UNIFORM INVENTORY OF BUILDING CONSTRUCTION.

The usual inventory of the structure by the average assessor scarcely rises to the dignity of an ordinary laundry list. Any merchant who would taken an inventory of stock in the same fashion would be laughed at. An assessment inventory of building items in a city ought to be so complete that any expert builder could take the inventory of any one structure and give an estimate of how much he would rebuild the structure for. Until assessors are compelled to make such an inventory, that for each building on a separate card or paper, there can be no practical exercise of judgment of value of that building. Tangible property can never be properly valued until it is properly and completely listed. Probably there is not an assessor in places, where the Somers System methods are not used, who has an inventory of the buildings of his city. How can an assessor value a building without knowing anything about the building except what he can see by walking around it once, and perhaps through it once? The man does not live who can do that accurately all day long. And when his work is done it ought to be on a permanent record, and not in his head, for mistakes are more easily detected on paper than they are in somebody's head, even though that head may be possessed by the best and most honest of men.

9. THERE IS NO PROPER OR UNIFORM METHOD OF ASCERTAINING REPRODUCTIVE COST.

Most assessors think that when they find out the amount of money it cost to build a building many years ago, they have ascertained the reproductive cost. It is not that cost that should be taken as a standard, but the cost of reproducing it today, when the assessment is being made; that is the maximum value that it can now have. Until there is some uniform method of ascertaining that reproductive cost today, buildings will not be finally valued on the same standard. Reproductive cost is capable of being reduced to tabular form and applied systematically for a given class. With expert assistance the assessors could devise workable rules and tables for this sort of work, and could prescribe forms for describing buildings, so that there would be uniformity in every part of the taxing district.

10. THERE IS NO PROPER OR UNIFORM METHOD OF DEPRECIATING BUILDINGS.

Every building in any city is worth something less than it would cost to reproduce it today, the day of assessment. Every assessor knows that, but having no way of ascertaining what it would cost new today, and no uniform way of determining how much less it is worth by reason of its age, its condition, and its obsolescence, he is forced to do more guessing as to depreciation. Not only can no one assessor

guess twice alike, but it is manifestly apparent that there are as many methods of guessing depreciation as there are local assessors in the State. Ninety per cent of the difficulty arising on this score could be obviated by the assessor in devising uniform rules for depreciation as well as rules for the other departments of building appraisals.

PROPORTIONAL VALUE DESIRABLE

In most states the law directs the assessor to assess at true value. In others, a uniform percentage of true value is directed.

It is more important, from the standpoint of justice and equity, to assess property proportionally, than to assess at any given percentage of actual cash value. The law says "full" or "cost" value, and it is much easier to assess at 100 per cent of value than at any proportion thereof. It is true that if all lands, for instance, were assessed at exactly 100 per cent of their value, they would also be proportionally valued, but the difficulty is altogether one of ascertaining the proportion. So far as land values are concerned, they can be ascertained correctly if two things are done.

1. Obtain the opinion of the community, and therefore uniformly.

The opinion of the community in any city may be easily obtained by:

(a) Establishing a unit of quantity upon which to exercise judgment.

(b) Asking the community to express its opinion by comparison.

This opinion may be applied to the valuation of specific lots by:

(a) Finding out what the mathematical relation of value is that exists between all possible depths of lots, and corner and alley enhancements.

(b) Bringing into existence workable tables that exhibit these various mathematical relations, so as to make usable the law of comparative valuation.

Outside of centers of population we have the unit of quantity, the acre. Rules and methods for gathering up the community opinion in rural districts can more easily be made, and more easily carried out, than in the cities.

All of which comes back to W. A. Somers' maxim: "To ascertain the value of anything ask one who knows; his answer will be what he thinks it worth, based upon his thinking that he knows what others think it worth."

CONCLUSION

We have in the foregoing endeavored to keep within the facts, rather than to indulge in capricious criticism of existing lamentable conditions. Criticism is of little avail unless it offers a practical solution for the difficulty—and this solution is now available. It consists in the use of the Somers System rules, mathematical tables and mathematical devices for ascertaining street values, and for measuring the result of the community judgment as ascertained by the assessor upon each lot and building in a scientific, systematic manner. These tools for the use of the assessor are supplemented by the services of two experts for each city, one of whom has charge of the land computation work, and the other for the compilation of information concerning buildings. No charge is made for the Somers System data. We simply charge a reasonable per diem for the services of these two experts. And our services are not in any manner to be construed as an interference with the prerogative of the assessor to determine values. The Somers System does not appraise; it is rather a system of appraisal. It is a scientific tool, guided by experts that will enable the assessor to accomplish accurately what has previously been done without precision, because without rule. The Manufacturers' Appraisal Company and its land actuary, W. A. Somers, can assist the assessor to the solution of all land assessment difficulties. The Somers Unit System of Realty Valuation is the only known system that makes it possible to apply judgment of value upon mathematical basis. We can show how it is possible, and with what regulations, a common judgment of value may be ascertained throughout any city; how it is possible to approach a common judgment of value, how it is possible to compare values of both buildings and land in any and all parts of any city; how to analyze factors of value on city sites; how to apply the law of comparative valuation in an exact and mathematical manner; how to classify buildings; how to ascertain reproductive cost in a uniform way. No doubt assessors would be able to do some of these things without our assistance; but we are sure that the small expense of our services would be in a money sense be worth much more than their cost, and in an economic and social sense be worth many times their cost.

Are Foote and Playdell the Agents of "Invisible Government" in Taxation?

By Walter W. Pollock

Does "Invisible Government" include in the scope of its operations and influence the administration of the taxation laws of many of the states and cities of the United States?

Are the National Tax Association and the New York Tax Reform Association the mediums through which the big interests are attempting to supervise and influence the action of state and city taxing authorities everywhere? Is Allen Ripley Foote of Columbus, Ohio, the open champion in his own state of everything reactionary, the bitter foe of everything progressive, the guiding genius of the National Tax Association, the mentor of the New York Tax Reform Association and some other similar organizations—is he worthy of the confidence and trust of public officials charged with the administration of tax laws everywhere? And has he the right and authority to condemn the efforts of all persons not acknowledging allegiance to him?

Is A. C. Playdell of New York, the Secretary of the National Tax Association and of the New York Tax Reform Association, the intimate associate of Allen Ripley Foote, a man who is worthy of the confidence of progressive taxation officials? May his sincerity as a tax reformer not be open to doubt in view of his close association with Foote, and his antagonism towards real taxation reforms?

These questions are prompted by experience and observation of the past three years, during which time the opposition of Foote and Playdell, and in some instances both of them, has been encountered, not only by the promoters of the Somers System, but also by those who would promote other taxation reforms. Foote and Playdell, having no connection with any official taxing bodies, have endeavored, with some success, upon false and misleading claims to prevent the equalization of land assessments; and their opposition exercised with craft and persistence, has resulted in the continuance in many places of the confusion that has always existed in that department of the administration of public affairs. Members of State Tax Commissions, City Assessors, and other well-meaning students of taxation, have been misled by these men, who have posed as taxation authorities. Even Woodrow Wilson, Progressive Governor of New Jersey and Progressive candidate for President, has apparently been led to believe that Playdell is a man worthy of trust, for he has recently appointed Playdell a member of an important Commission to investigate and report upon tax assessment methods in New Jersey.

In future numbers of the Somers System News the records of Foote and Playdell as pretended progressives and actual reactionaries will be discussed. The insidious character of their reactionary influence upon good men, through the organizations of a semi-official character which they have organized and kept alive for pretended "reform" purposes, will be outlined. The efforts of Playdell to write into the charter of a Colorado city an extension of the terms of public utility franchises; the payment of the traveling expenses of college professors to attend the International Tax Association conventions and the attempted coercion of those educators in behalf of measures favored by the big interests; their professions as sympathizers with the Single Tax movement, and their opposition in various states to the initiative and referendum as a means to the end of real tax reform—these and other evidences pointing to Foote and Playdell as the agents of "Invisible Government" will be discussed in later editions of this publication.

This statement will deal only with their opposition to the Somers System, which campaign of opposition has been unfair, untruthful and reactionary. We believe that their opposition to the Somers System cannot be explained or justified on any hypothesis except that they are interested or are the agents of persons interested in preventing substantial improvement in assessment methods. Possessing and advocating no substitute for the Somers System, Playdell has conducted a continuous campaign against its installation, creating doubt in the face of positive proof that the System, wherever installed, has given all but universal satisfaction; and that the only property owners who have expressed dissatisfaction have been persons who have by the Somers equalization of assessments

been deprived of special advantages in low assessments possessed so long under the old inferior plan that they have come to regard them as vested rights.

Nearly three years ago W. A. Somers, at the suggestion of the late Tom L. Johnson, then mayor of Cleveland, was employed by the Board of Assessors of Real Property of the City of Cleveland as chief clerk. The Somers Unit System of Real Valuation, invented by Mr. Somers, and previously used for the assessment of property in the City of St. Paul, Minn., was at that time adopted by the Cleveland Board of Assessors, and was installed for the re-assessment of real property under the direction of Mr. Somers. Mr. Somers had some years before been employed in Cleveland in an experimental checking over of assessment values. The results of that experiment showed not only the numerous inaccuracies in the assessment of 1900, made without the application of any system, but it also disclosed the efficacy of the Somers System in ascertaining true and relative values.

Naturally the newspaper accounts of the work of Mr. Somers, coming to my attention for the first time in the autumn of 1909, appealed to me in a professional way. I called upon Mr. Somers, and after a thorough investigation of the work he was doing and the results of it, I made an arrangement with Mr. Somers to promote the operation of the Somers System through the organization of the Manufacturers' Appraisal Company. I supposed that a plan to equalize assessments would meet with the universal approval, not only of citizens, but of tax assessing officials everywhere, and that support I found to be true. I took it for granted that publicists who realized the utter hopelessness of past efforts to equalize assessments, without an adequate system for apportioning tax values on a scientific basis, would have an open ear to the proposal that assessments should be so equalized,—and this I found to be partially true. I imagined that after a successful demonstration of the worth of the Somers System and the great value of the services of experts to assist tax authorities in the application of a scientific system had been proven, there would arise universal demand for expert services required for the installation of such a system. This I have found to be true, except where Allen Ripley Foote and A. C. Playdell possess influence over the public mind or over taxing officials.

Allen Ripley Foote, besides being the President of the then International Tax Association, was, and still is the active head of the Ohio Board of Commerce, an organization whose membership comprises many of the big business corporations of the State of Ohio, as well as individuals and lesser corporations located in all parts of the State of Ohio. In anticipation of the approaching revision of assessments of real property in Ohio in 1910, Mr. Foote invited A. C. Playdell, his associate in the International Tax Association, and Secretary of the New York Tax Reform Association, to deliver a number of addresses in the State of Ohio on the subject of assessments. Mr. Playdell delivered his address in the City of Columbus. He outlined in general terms the necessity for the use of rules, as well as excellent "judgment" in the making of assessments. Without mentioning Mr. Somers or the Somers System, he described the principles first enunciated by Mr. Somers, and applied by him in all of the work he has ever done in aiding assessors in their work. Mr. Playdell enlarged upon the work of the New York Department of Taxes and Assessments, and inferentially claimed for that department the application of the scientific principles of assessment which he described in his address. At a convention of the city and township assessors of the entire State of Ohio, called by the State Auditor, but dominated by Foote, Playdell was given an opportunity to deliver his address again, under the auspices of the Ohio Board of Commerce.

The members of the Columbus Board of Assessors attended the addresses by Playdell, and soon afterwards wrote to him for information as to whether he could suggest some expert in real estate assessment work who might aid the Columbus Board of Assessors in applying the scientific principles outlined by Playdell in his address, for the coming assessment in the City

of Columbus. Playdell replied that W. A. Somers, who had been employed in the New York Department, was on leave of absence, and was at that time employed in assisting the Cleveland Board of Assessors. He suggested that it might be possible to secure for Columbus the services of Mr. Somers for part of each week. This correspondence was turned over to me as head of the Manufacturers' Appraisal Company, I having in the meantime completed an agreement with Mr. Somers for installing the Somers System in Ohio cities other than Cleveland. As a result, a contract was made with the City of Columbus for the assistance of the assessors by giving them the use of the Somers System without charge, but charging a stated fee for the services of experts for the installation of the System as applied to the valuation of land, and also the services of experts to secure descriptions and to apply uniform factors of valuation and depreciation in the appraisal of buildings for the entire City of Columbus—no payment to be made until the completion of the assessment, to the entire satisfaction of the Board of Assessors, so far as the expert services were concerned.

A pamphlet was prepared for distribution at the convention of assessors in which our services were offered to assessors throughout the State of Ohio. Naturally supposing that public officials would be interested in what we had to offer, I was astonished to read an interview in a Columbus paper with Mr. Foote denouncing the plan in unmeasured terms as an attempt to usurp the powers of assessors, and to control in an improper way the officials elected by the people to perform the work of assessment. The statements made by Foote were both unfair and untruthful. Playdell, who had previously approved the work of Somers in his letter to the Columbus Assessors, immediately changed front, and from that time until this he has been continually engaged in a campaign to prevent the installation of the Somers System everywhere. The arguments used by Playdell indicated that he was under the complete influence of Foote.

At the convention of the International Tax Association held at Milwaukee in the autumn of 1910, Foote delivered an address on "Taxation Work and Experience in Ohio." I will quote from this published address to show the basis of his opposition to the Somers scientific system of assessment as proposed by the Manufacturers' Appraisal Company, and shall then attempt to prove that this opposition was unjust and insincere, and that it could have had no motive that could be justified by his claim of the confidence of tax officials that he is a disinterested and progressive adviser in tax matters. From Mr. Foote's paper I quote as follows:

"AN ASTOUNDING PROPOSITION: EXPLOITATION OF TAX ASSESSMENT WORK BY A PRIVATE CORPORATION FOR PROFIT."

"I have never known a person engaged in tax reform work who had a self-seeking commercial purpose. It is difficult to correctly express the surprise and indignation felt by myself and others when men appeared at the State Conference of Real Property Assessors, distributing circulars announcing that a private corporation organized for profit proposed to contract with City Boards of Real Property Appraisers to do the work of determining the value for taxation of all real property in their respective cities.

"This was a bald proposition to the Boards of Assessors to permit a private corporation to exploit for gain the work they were elected to perform with the aid of individually employed assistants.

"I at once denounced this proposal in the public press, informing the assembled assessors and the public that all assessors in Ohio would be furnished without charge, with the tables and rules in use in New York City for determining the value of real property, acknowledged to be the best in use by any tax assessing officials in this country. This was done by supplying the booklet to which reference was made."

After quoting a "letter of transmittal" by Lawson Purdy, President of the New York Department of Taxes and Assessments, Foote went on to say that we had made but one contract in Ohio. He warned taxing officials everywhere to beware of making engagements with this company, on the false claim that we were charging exorbitant prices wherever possible, and were making contracts at low prices where it was not possible to secure a high price. He described the terms by which we were undertaking to perform tax assessment work as such that if entered into by cities would constitute a public scandal. He pointed to a contract made with the City of Philadelphia for an investigation of tax assessments as indicating an effort on our

part to make a raid upon the public treasury of that city. In other words, he constituted himself the public guardian of assessment officials everywhere, and undertook to cast a cloud upon the whole idea of undertaking to make assessments on any basis except that of individual judgment. He pointed the finger of scorn at the City of Philadelphia for a contract made with us for the investigation of assessments there, using the phrase in black type, "Poor filthy Philadelphia!" He raised the question "How the taxing authorities in any city can justify themselves for making a contract similar to the one proposed to be made with the City of Philadelphia, is beyond my ability to understand."

After quoting some figures furnished him by Playdell purporting to show the annual cost per parcel for assessing properties in various cities, which figures have been proven utterly incorrect and unreliable, he went on as follows:

"The assessment of property for taxation is a governmental function. The exploitation for private profit of a public service that is directly responsible for determining the values of property for taxation cannot be condemned too strongly. It is a return to the system in vogue in ancient Persia when despoils farmed out the collection of taxes to petty scoundrels. It will tend to transform those who exercise the power of taxation into farmer-generals, a privileged class in France before the Revolution of 1789, who farmed or leased the public revenues of the nation and were guilty of great extortion."

He then again quoted Playdell's endorsement of his own views as follows: "The assessment of property for taxation is a governmental function which should not be contracted out to private individuals. To determine the relative values of real estate requires the exercise of judgment and discretion, and involves not merely the doing of justice between individual property owners, but also, the determination of the amount of their contributions to the public revenues. This is too serious and vital a matter to be turned over to contractors, however well qualified they might be to furnish technically correct valuations."

"If assessment conditions in any city are bad, they will not be permanently corrected by bringing someone from the outside to make a valuation by a method of their own, for, in subsequent years, the same inequalities will appear. The only way to secure good assessments is to have public officials who are capable of doing their work, and having them work out a system which can be used by them and their successors."

It should be borne in mind that neither Foote nor Playdell are or ever have been public officials charged with the duty of making assessments. They have organized the various associations from which they have secured salaries, and their associations and organizations are and always have been entirely outside of the body of officials charged with the responsibility of making assessments. They have themselves exercised, as is shown by this paper of Foote's, an effort to influence the action of public officials in taxation matters with no authority except their own assumption of superior knowledge in various lines of taxation. Playdell in his addresses advocated the use of scientific assessment methods. He published a pamphlet in which the supposed New York assessment system was supposed to be explained. This New York System as explained by Playdell in his pamphlet is about as effective for the equalization of assessments as it would be to put a freight car on a level railroad track without motive power, and expect it to reach any proposed destination.

But perhaps the real motive back of the attacks of Foote and Playdell can be disclosed from the record of their own statements. From the same address of Foote it is disclosed that their objection was not so much to the use of rules for the assessment of real property as it was to the use of rules "by a corporation engaged in business for profit." In other words, there was no objection to their use of the rules provided by Playdell, to be applied by non-expert assessors, without the use of expert assistance. In the same address Foote goes on and shows the necessity for the use of adequate rules for the assessment of real property. He makes in this address the recommendation that a committee of the International Tax Association should be formed to compile a book of tables, rules and directions for the assessment of real property. In this connection he says:

"Guided by this experience, I believe the International Tax Association can render a service of great value by creating a committee under whose auspices, in co-operation with the city, county and state taxing officials of every state, and with real estate men generally, a book of tables, rules

and directions for the assessment of real property can be compiled and published, to be supplied at the cost of publication to the taxing officials of every state and province desiring the same. The official adoption by any state of tables, rules and directions so formulated will render the work of assessing real property uniform and equitable throughout the state, and similar action in all states will result in a body of comparable statistics of real property values that will be of the highest value to property owners and taxpayers, taxing officials and state legislatures.

"Comparable statistics, scientifically developed, will result in uniformity in tax laws and administrative procedure. In its report to be submitted to this conference, the Committee on Uniform Classification of Real Estate says: 'Without a proper statistical basis, true comparison between states and localities is impossible, and without true comparison the determination of the real economic effects of tax laws and their administration is impossible.'

Again: "In view of the foregoing I recommend that the proposed Committee on Tables, Rules and Directions for determining the taxable value of real property be instructed to devise and recommend all necessary forms for maps, field books, records and other office utilities designed to render the work of determining and registering values continuous, accurate and economical. In case any person becomes known to said Committee as possessing exceptional ability for such work, I recommend that he be employed to aid the Committee in its work, and also, when requested, to visit the Assessment Departments of cities and counties for the purpose of instructing taxing officials in the practical use of the tables, rules and directions, and in the preparation and use of maps, field books, records and other of fiscal utilities devised and recommended by the Committee, to the end that the best methods developed by study and experience may be placed at the service of every City, County, State and Province without exploitation by private individuals or corporations."

In his recent work in the State of Ohio in opposition to the progressive amendments proposed to the State Constitution, Mr. Foote showed an adroitness worthy of a better cause. He undertook in the campaign which closed on September 3, to nullify the aspirations of the people of Ohio for a Constitution that would more nearly express the will of all the people of the State. He showed his subservency to the interests which have for so long a time dominated the administration of public affairs. He tried to tie the hands of the people so that the people could not assert their will in the operation of their own government.

It is possible that the advent of the Somers Unit System of Realty Valuation as a practical means of actually creating equity in the assessment of real property, with experts to assist the taxing officials in the installation of a truly scientific system, had forestalled the ambitions of Foote and Playdell. Certain it is that all the plans outlined and proposed by which the non-official International Tax Association should gain a supervisory authority over assessments "everywhere," would have resulted in giving Foote and Playdell a tremendous influence and power over the making of assessments of real property all over the United States and Canada. Is it not a fact that their objection made to the installation of the Somers System by a private corporation for profit should in fairness be made to apply with equal force to the efforts made by Playdell and Foote as outlined in this proposal of Foote's address? In what manner and at what time and place did these men gain a position to direct, supervise and control public officials in their duties? When did they become experts in assessment work? From what source have they gained authority to criticize assessors who have elected to employ the Somers System in equalizing valuations, and to deny the sincerity of such assessors in approving the Somers System as an equalizer of valuations?

There are many tax officials of high standing and progressive purpose who have been misled by Foote and Playdell, in this Somers System agitation, as well as in other matters. These officials have looked upon Foote and Playdell as disinterested publicists, whose work has been undertaken in the public interest. Foote's open leadership in the opposition to the progressive amendments to the Ohio Constitution ought to mark him in future as a man in whom only reactionaries should have confidence. He is today probably the most thoroughly discredited man in public life in Ohio, because of his direction of the fight against every people's power constitutional proposal.

The tax officials of Ohio or of any state or

city, who in future looks to Foote for advice or counsel, will by that act stamp himself as either open to influence in the performance of his official duties by an agent of the big "interests" or as inexcusably ignorant of a notorious situation.

For nearly three years Foote and Playdell have directed their attacks upon the Somers System. I have been assailed in the practice of my profession and the conduct of my business from one end of the country to the other. But there have been a few tax assessment officials who have installed the Somers System in spite of the clamor of these self-appointed censors of the acts of taxing officials. They have aided tax-dodgers in their efforts to prevent payment of reasonable fees honestly earned, and have tied up fully \$50,000 of money expended under engagements in the Cities of Philadelphia and Columbus, as explained elsewhere in this publication. But within that time ten cities have been greatly benefited by the use of the Somers System service which my company furnishes. There can be furnished an overwhelming volume of proof of the falsity of the claims that the Somers System service usurps the power and authority of the tax assessor; that it "determines values" in opposition to the judgment of the public officials charged with the duty of appraising and equalizing real property; that we have been trying to raid public treasuries; that we can be compared to the Persian and French taxfarmers; and that the supposed New York "rules and tables" are adequate to the problems of assessment, either with or without expert operators.

Neither Mr. Somers nor the promoters of his system have ever made any pretensions as tax reformers. Mr. Somers, with a keen analytical mind, discovered how to make mathematical comparisons of land values. He invented a "yardstick" for the measurement of judgment of land values, and a system for applying that judgment to parcels of land of varying sizes, shapes and locations. Lawson Purdy, the head of the New York Department of Taxes and Assessments, who has shown strong sympathy with Foote and Playdell in their opposition to the Somers System approved the Somers System in private letters and in public addresses some years ago, and in an official report stated that Mr. Somers was the only man who had attempted to "formulate rules that take into consideration the various conditions affecting the value of corner lots." The attempts of Playdell and Foote to make a comparison between the Somers rules and those supposed to be in existence in New York and elsewhere, have been entirely unsuccessful so far as discrediting the Somers rules is concerned. And the claim that excessive fees are charged for the Somers System installation is simply puerile. The protective spirit exhibited towards "guiltily" tax officials whom they would save from Somers System rapacity would be amusing if it were not for the fact that by raising a cloud of doubt as to the good faith of the operators of the Somers System, many cities have been frightened out of the equalization of assessments. In a public discussion at Yonkers, New York, a telegram was read from Tax Commissioner Pastoriza of Houston approving the results of the use of the Somers System in the strongest terms. In reply to this Playdell had the effrontery to say that Mr. Pastoriza approved the Somers System because Tom Johnson of Cleveland had approved it, and that Pastoriza really didn't know what he was talking about! The many outrageous attacks upon the integrity of a reputable business enterprise, would in the opinion of our attorneys justify an action for heavy damages. The only possible motives for these attacks that can be imagined would be discreditable to men claiming reputations as disinterested tax reformers. The motives of these men in their attacks upon the Somers System have never been disclosed, but the only imaginable justification for their singular actions are that they, in serving their "big interest" masters, are trying their best to prevent equitable land assessments, or that they are piqued because they find that they are losing their prestige as tax authorities.

TO ASCERTAIN the value of anything ask one who knows; his answer will be what he thinks it worth based upon his thinking that he knows what others think it worth.—W. A. Somers.

BEWARE of the taxation "expert" who talks in generalities. Sift what he says, and you may find that he has no practical knowledge of what assessment work consists of.

THE time to equalize an assessment is when it is made, not afterwards.

Columbus, Ohio, Best Assessed City, Failed to Pay For Somers Services

The fact that two of the officials of Franklin County, Ohio, in which is located Columbus, have thus far successfully resisted the payment to the Manufacturers' Appraisal the contract price of \$8,000 for the installation of the Somers System in the assessment of 1910, has naturally caused those whose jealousy has made them enemies of the Somers System, no little comfort. A history of that case up to the present time is important, inasmuch as in all the cities where the Somers System has been used for assessment work, Columbus is the only city that has refused to pay its bill. And many a good citizen of Ohio's Capital City is ashamed to acknowledge that this is so.

Mr. Somers was engaged by the Cleveland Board of Assessors in November, 1909, to assist in the assessment of that city. Soon afterward the Manufacturers' Appraisal Company made an arrangement with Mr. Somers for the installation of his system in other cities in Ohio. The Columbus Board of Assessors had the same task to perform in their city as had the Cleveland Board and they were as ambitious to make a perfect assessment as were the members of the Cleveland Board. The attention of the Columbus Officials was called to the Somers System and to the action of the Cleveland Board in adopting it. The Columbus Board came to Cleveland and examined into the plan of the Cleveland Board, went over the features of the Somers System with Mr. Somers himself, and examined into the ability of the Manufacturers' Appraisal Company to render the necessary expert service to install the system for them. After careful consideration the Columbus Board unanimously decided to make a contract with the Manufacturers' Appraisal Company, the consideration being \$7,000 for the city of Columbus as it then was. Anticipation of a considerable area afterward made, resulted later in a supplementary contract for \$1,000, making a total of \$8,000.

This was the first contract of the kind that we had ever made, and at that time the Somers System as Mr. Somers then had perfected it, had never been used for assessment purposes. It was natural, therefore, that the Columbus Board should safeguard their contract so that if what was to them an experiment should prove a failure, either during the progress of the work or at its conclusion, they should not be compelled to pay the company for its service. A bond was at first considered but at the suggestion of the President of the Company, it was decided that we should wait until the work was all done, and that payment of the Company's fee should depend entirely upon the approval by the Board of the work performed. In other words, the Board was to be the sole judge of whether the Company had carried out its contract, and whether the work was satisfactorily performed. The Board could have refused to approve the Company's bill for no reason at all, and there would have been no recourse on the part of the Company.

The contract itself was written by the attorney for the Columbus Board of Assessors. This fact is important, as will later appear. Therefore any technicalities in the contract, if there were any, that violated the laws of Ohio, were written by the Columbus Board of Assessors or by its lawyer. The Manufacturers' Appraisal Company's officials knew exactly what was expected of its experts, and had a right in all good morals to believe that the lawyers of the Board of Assessors of Columbus would so frame the contract of that there would be no technical violation of the Ohio laws. That the lawyers did so frame the contract as not to violate the laws of Ohio, has been decided affirmatively by one Ohio court, and negatively by one court; and negatively by a second court, the Supreme Court, but this latter decision was reconsidered, and the Court decided to rehear the case in September. Upon the rehearing the Supreme Court affirmed its former decision, without rendering an opinion giving its reasons. Thus there appears to be no way in which payment of the fee can be collected.

Work on the Columbus assessment began at the end of December, 1909. Arthur H. Guild, Vice-President of the Manufacturers' Appraisal Company, had charge, and remained in Columbus constantly employed on the assessment work until the following October, although at the time of making the contract the Company made it

with the understanding that the work was to be finished by July 1. During several months of the spring of 1910 the Company maintained not less than five experts in Columbus to carry out the wishes of the Columbus Board. The interpretation of the contract was left entirely to the Assessors, and in the only controversy that arose between the Board and the Company, which had to do with building appraisal and not with land appraisal, the Company followed the interpretation of the Board to the letter, although the Company claimed the interpretation was wrong. This interpretation as the Board made it cost the Company the services of an additional expert for several weeks, but so anxious were the officials of the Appraisal Company to satisfy the Columbus Board, that this additional expense was incurred without murmur.

There were two circumstances that caused a final delay in the completion of the assessment of 1910 in Columbus. The first was the annexation of a large tract of land at the north end of the city after the assessment was about half completed.

The second cause of delay was the condition of the records as they were turned over to the Board of Assessors by County Auditor Sayre. It developed that after the lot values had been computed, using the records as they were turned over by the Auditor, that not less than 30 per cent. of them were wrong. In other words, the Auditor had turned over to the Assessors the lot dimensions as they had been ten years before, and during that decade many of them had been further divided. Consequently this 30 per cent. of the work had to be done all over again, and the experts of the Company had to stand by and do work a second time, although the contract contemplated no such thing, and this was done without a murmur.

Auditor Sayre was in and out of the office of the Assessors many times during the assessment. At no time did he ever make any criticism of the methods employed by the Assessors. That it was none of his affair was true, but it was as much his affair then as it was later, when he attempted to criticize those methods, and refused to pay for services rendered by the Manufacturers' Appraisal Company. A curious thing happened during the progress of this work. Auditor Sayre had charge of the Assessors for the townships of Franklin County. Along in June the Assessor for Arlington, a suburb next to Columbus, turned in his assessment. Auditor Sayre did not approve of the work as turned in by this Assessor, and to fortify himself, he asked Member Woolman of the Columbus Board of Assessors to take Expert Guild of the Manufacturers' Appraisal Company out to Arlington and go over the assessment that he thought too low. Sayre knew that Guild had no knowledge of land values in Arlington, but he did know that Guild was capable of using the Somers System to compute Woolman's judgment, and he knew Woolman was well posted on land values in Arlington. Thus did Sayre insist upon using for his own purpose the System that he afterwards attempted to condemn as inadequate. Sayre obtained from Guild and other experts of the Manufacturers' Appraisal during the spring and summer of 1910 not less than \$1,000 worth of service for which he never even thanked anyone, nor was there any charge ever made by the company for this service. Yet this is the man who condemns the services of the Manufacturers' Appraisal Company and prevents it from obtaining pay therefor.

The work was finally completed, and the books were turned over to the Board of Review for the city of Columbus. The President of that Board at that time was very antagonistic to the Somers System and the appraisal that had been made by the Columbus Assessors. Nevertheless, the Board of Review, after consideration during the time allotted by law, changed the land values a total of only \$53,000, and the building values a total of a little over \$3,000,000. In other words, the Board of Review changed the assessment of Columbus about two per cent., practically all of the changes being a difference of opinion between the two Boards on the question of depreciation for buildings.

The assessment was then certified to the State Tax Commission, and that Commission commented the Columbus Board of Assessors, and refused to make a single change in the assess-

ment. The Columbus assessment was looked upon by the State Tax Commission as being as nearly perfect as it was possible for so huge a task against the adverse circumstances that the assessors had to contend with. As a matter of fact the city of Columbus is one of the very few adequately and equitably assessed cities in the United States, and during the past two years since the work was completed, the leading real estate dealers and merchants of Columbus have come to recognize the adequacy of the assessment of 1910.

When the work was completed the Columbus Board of Assessors unanimously passed a resolution approving the work of the Manufacturers' Appraisal Company, and issued its voucher for the full amount of its bill, \$8,000.

It was at this time that Sayre suddenly woke up to the fact that the work of the Manufacturers' Appraisal Company was worthless, and refused to pay the voucher, although every other bill of the Board of Assessors had been paid by him, and notwithstanding that nowhere in the law is he authorized to approve or disapprove the quality of the work done by the Assessors. Mandamus proceedings were begun against Sayre, and Judge Kinkade of the Common Pleas Court, after a two days' hearing issued a writ of mandamus to compel Sayre to pay the claim. County Attorney Turner for Sayre, carried this case to the Circuit Court of Franklin County. This Court decided the case adversely to the Company on the ground that the contract on the face of it compelled the Company to substitute its judgment of value for that of the judgment of the Assessors. The law of Ohio, like the laws of all other states, provides that the judgment of the Assessors as to values shall be used. The testimony before the Court, undisputed and uncontroverted, showed that whatever the technicalities of the contract, the Company as a matter of fact did not substitute the judgment of any of its employees for that of the Assessors, but that in every case the judgment of the Assessors was used. And be it remembered that if such a technicality was in the contract it was put there, even though inadvertently, by the attorney of the Board of Assessors; and even if such a technicality were there, the work was not done in accordance with such an interpretation of the contract, but rather upon the interpretation that the Court in effect said was legal.

And upon this technicality the Circuit Court refused to allow Franklin County to pay for valuable services that it had accepted and over which there was no controversy until after the work was all completed.

The case was then appealed to the Supreme Court and that Court after the filing of briefs and argument of one hour on each side decided by a vote of 4 to 2 to uphold the Circuit Court. However, within three days the following request for a rehearing in the case was filed:

"The facts that the relator in this case has performed honest and valuable service to the city of Columbus at an expense to itself approximating the amount which the Board of Assessors agreed to pay for its services, and that the affirmation of the judgment herein puts an end to any chance which the relator has to get its compensation, and that to be erroneous, because of a misunderstanding of the case, furnish, we respectfully submit, an excuse for asking this court to reconsider the case, for asking this court to reconsider the case for a reconsideration and rehearing of this case upon the following grounds: to-wit: "1. The Board of Assessors sought the assistance of the relator and did not make a contract with the relator to render expert assistance until said Board had advised with the county law officers and with the defendant in error as auditors, the contract having been drawn by the city solicitor, the legal adviser of the Board of Assessors, (see minutes of Board of Assessors.) Mr. Weber, (see prospectus, advised the Board that relator should be paid."

"2. As nearly as counsel for plaintiff is for can find out the judgment of affirmance is for the reason and upon the ground that the system of appraisal of land values (not building values) followed by the Board of Assessors was not strictly in accordance with the statutes.

"(a) This is a criticism upon the Board of Assessors and the method said Board adopted to reach valuations of land.

"(b) The work of the Board of Assessors and the return of the appraisal have been accepted by the auditor and all other county officials concerned therein, and is now the basis of taxation for real property in Columbus. Likewise the State Tax Commission has accepted said report, without material change by the reviewing bodies and without commendation and without criticism upon the method.

"(c) The work of the relator in assisting the Board of Assessors was not primarily connected with the Somers System. The relator as shown legitimate service as an expert in many respects by the minutes of the Board, in many respects wherein the Somers System was not concerned. "(d) The contract of the relator, reduced to its ultimate essence, is not to appraise and is not to install the Somers System, but to render assistance by statute.

"The court, we respectfully submit, does not understand the Somers System and is attaching too much importance to the Somers System in deciding this case.

How Commissioner Pastoriza of Houston Used Somers System for Equalization

"(a) The Somers System does not appraise. It is simply a method of calculating values, based solely upon the judgment of the Board of Assessors, and after appraisal by the Board has been made.

"(b) If the court will consider the record and the testimony of the individual members of the Board of Assessors, which is undisputed, there can be no doubt about the truth of the statement appearing in paragraph (a) above written.

"(c) It happened that instead of calculating by the square foot or by the front foot, the Board of Assessors calculated by another unit, practically the same. No man ever appraised real property without figuring its extent, its quantity, and its relation to adjacent property and to the street. If property cannot be so appraised then it was never appraised correctly. The Somers System does nothing more than we have just stated. The difference between the Somers System and the other methods of calculation just suggested is that the Somers tables are accurate and the others are inaccurate.

"(d) Therefore the method adopted by the Board of Assessors was not illegal. These departments of the state and city and county government charged with receiving and passing upon said report having held it legal, the court should, if possible, follow their opinions and judgments.

"The court should remember, too, that Cleveland authorities were of the same view.

"4. The relation performed valuable service in appraising buildings with which the Somers System had nothing to do whatever. Therefore this case should be sent back to the Circuit Court with instructions to ascertain what portion of the work of the relation was performed in appraising buildings. This portion of the work was certainly not tainted with illegality. The principles of the common law will not require the voiding of the entire contract if any part of it can be sustained.

Morris vs. Wray, 16 Ohio, 489-493.

"Without difficulty and by referring to the minutes and memoranda of the Board of Assessors any court can determine the portion of the work performed by the relation which had to do with appraisal of buildings. For this at least the relation should be paid.

"We respectfully submit that the court should not tolerate the approval and acceptance of the appraisal returned by the Board of Assessors in Columbus, and call it legal, and at the same time refuse to pay those employed to assist the Board in said work. Every other expense of the Board of Assessors, including sixty clerks, who figured values under direction of the relation, has been paid. If the appraisal by the Board of Assessors was not legally performed, no portion of the expense of the appraisal should have been paid.

"6. We submit the court should not follow the ruling of the Circuit Court as to Section 584, G. C., for that section was not law when the relation's contract was made. It was enacted afterwards and was written by the Codifying Commission.

"7. Since the Somers System is nothing more than a method of calculation and does not appraise it is not a violation of the statutes having reference only to appraisal, to use this method of calculating, or to employ relation for that work.

"8. We respectfully submit that the court has attached too much importance to the Somers System in deciding this case. That is merely a method of figuring value by specific lots and cannot be regarded as a method of appraisal. Therefore it cannot be of importance in this case.

"This leaves as the only question to be determined the authority of the Board to contract for the assistance of relation.

"We submit no one can question this.

"See Shelby, Auditor, vs. State, 63 O. S. 54-54. 'Honestly believing the judgment of affirmance is unjust, we beg the court to again consider this case which is of so much importance to relation.'

That Auditor Sayre is almost alone in his opinion that the Somers System methods were useless in the assessment of 1910, we quote the following opinions expressed by various leading real estate men of Columbus:

"H. Marshall of Marshall Brothers, says: 'We find that the Somers System has equalized taxes so that most people are satisfied.'

"C. R. Swickard says: 'The recent assessment under this system was very good, and far better than would have resulted under the old way.'

"W. G. Neff, of the Ohio Realty and Construction Company, says: 'I would say the appraisal in general was fairly satisfactory.'

"D. P. Cooke, of Martin & Cooke, says: 'I find in talking with property owners that the greater number of them are apparently satisfied with the general results. We are doubtless on a more equitable and satisfactory basis than ever before.'

"William P. Zinn, of Zinn & Robbins, says: 'The Somers System as used in Columbus is on the whole a satisfactory method of appraisal, generally speaking. This is true particularly in the valuations arrived at in ground values, more particularly in the business section. It is the general consensus of opinion that the new system is far superior to the old one.'

Upon the Supreme Court rehearing the former judgment was affirmed, by a vote of 3 to 2. Thus of the ten judges who sat in judgment on this case, five took one view and five the other. The Common Pleas judge, one of the three Circuit judges and three of the six Supreme Court judges all said the contract was legal; but as two of the Circuit judges and three Supreme judges decided otherwise, the preponderance of court judgment prevents collection of the fee because of the technical construction of the contract by the courts. The County of Franklin will be sued for services performed, independently of the contract.

At the municipal election of February, 1911, J. J. Pastoriza, a retired publisher, was elected one of the City Commissioners, and to his lot in the city work fell the assessment of the property of the City of Houston for tax purposes. Mr. Pastoriza had met W. A. Somers several years before, and had absorbed many of the ideas of Mr. Somers and some of the principles of the Somers System. The task of reassessing property was immediately upon him, and he performed the work that year upon what he knew of the Somers System methods. The improved over old conditions was marked, and the increased revenues to the city were great, without working any hardship on any one, and there was general commendation of his work.

As soon as he was through that year, he got into correspondence with the Manufacturers' Appraisal Company to the end that he might know whether it was wise or not to install the real Somers System the next year. He learned that the Company was working for Assessor Henry J. Arnold of Denver in the assessment of the business portion of that city, so he decided to take his vacation in Denver and investigate the system where it was being operated.

He spent two or three weeks in this examination, and upon his return to Houston he recommended to Mayor Rice and his brother Commissioners the installation and use of the Somers System for the next assessment. Because of the success of Mr. Pastoriza in the assessment of the year before, his recommendation was agreed to.

The work began early in October, two experts of the Manufacturers' Appraisal Company being employed. Mr. Pastoriza invited the co-operation of the Chamber of Commerce and the Real Estate Board. These bodies appointed committees to assist in this work, and these committees, composed of perhaps twenty-five of the leading business men of the city, spent day after day in furnishing information and in criticizing the judgments expressed by each other. It required but a day or two for these men, most of whom had never heard of the Somers System before, and who had been in the habit of expressing their opinions of value in various ways, to change their habit of thought and expression, and to think and talk in Somers System terms. They found themselves comparing street with street, part of street with another part of the same street, and so on. The public was invited through the newspapers to criticize and to furnish opinions of value, and in this way the whole community took part in the valuation of the land whose value they all made.

One of the experts of this Company computed the lot values, and another expert took charge of the making of the inventory of the buildings of the city; he also suggested valuation and depreciation tables for the benefit of the Commissioner and the Assessor, and for the examination of such local opinion as these officials cared to invite. In this way the buildings were inventoryed, classified, computed as to present reproductive cost, and as to depreciation from that cost.

This system took the place of no system, analysis took the place of guessing; all the people were consulted during the assessment, and the assessment was equalized as it was made. What is the result, now that the work is all over with?

Every newspaper in the city endorses Commissioner Pastoriza for installing the Somers System. Every city official endorses the new method of assessing property.

The property owners, large and small, were able to center their objections if they had any, upon the judgment that was used, and compared values of different sites because they knew that the computations were all made in the same way. For the most part these property owners expressed themselves as more than pleased with the results.

The tax rate has been decreased from \$1.70 to \$1.50.

The assessment was increased from \$62,000,000 to \$4,000,000, and yet more than 3,000 taxpayers will pay less taxes this year than they did last year.

Notwithstanding the reduction in the tax rate the city will have more money to expend for public improvements than it did the year before. The assessment of Houston, Texas, as a whole

has excited much attention all over the United States. While the Somers System has nothing to do with the policy of taxation, it may be interesting to note what is claimed for the Houston assessment by the man who made it. On August 1, 1912, J. J. Pastoriza issued the following statement:

"The effect resulting from the partial exemption from taxation of personal property and improvements upon land in Houston, Texas, has been magical.

"In the first six months of 1912 there were 319 more buildings erected than in the first six months of 1911, and the value of these buildings, at its 1912 amount, to the city, goes to show that the buildings erected in 1911, which goes to show that the partial exemption from taxation had the effect to stimulate the building industry. It also has the effect to increase the number of land sales without depreciating the price of land. So that it appears that the assessing of land at 70 per cent on the dollar of its full value and taxing it for city purposes at the rate of one and one-half per cent on the dollar or \$15.00 on the \$1,000.00 value in addition to the State tax of \$8.60 per \$1,000.00 value, will not affect the selling price of land, but will stimulate its sale at an advanced price. This makes a tax rate of two and twenty-three-hundredths (2.23) per cent on a seventy (70) per cent valuation of land and a twenty-five per cent valuation of improvements.

"In 1911 the assessment of the land values of Houston, Texas, was increased twenty-five per cent over former assessments. At the beginning of 1912 land values were equalized by the use of the Somers land value system of Realty Valuation, and all lands were assessed at about seventy per cent of its fair selling value, which in most cases was the same as the value of the land as shown by the brands of individuals, such as stores, hotels, and other buildings and other improvements upon land and land machinery of manufacturers upon land and land machinery of public service corporations were assessed at twenty-five per cent of their productive value. For the first time in Houston, the assessed value of the franchises of the various corporations amounting to \$1,789,000.00. A former charge for building permits was repealed. In fact, there was more done to relieve industry from taxation in Houston, Texas, during 1912 than has been done in any other city in the United States up to date.

At the conclusion of the assessment work in Houston, the newspapers were unanimous in their praise of the Somers System and the work of experts of the Manufacturers' Appraisal Company. The Houston Chronicle, one of the leading newspapers of that city, in its issue of February 22, 1912, at a time when final totals had only been estimated, and during the progress of the work had the following:

"The reassessment of Houston's taxable property under the Somers System has so far advanced that it is known the total assessable values reported for taxation will advance from \$7,000,000 for 1911 to at least \$10,000,000, and possibly as high as \$120,000,000 for 1912. It is known that in 1912, for the first time, land values in Houston will be assessed on an equitable basis. It is known that for the first time the main weight of taxes will rest not upon the small owners of home properties, but upon large owners of lands whose sale value is constantly and rapidly increasing by reason of the increased demand for such lands for commercial use. It is known, in a word, that for the first time in Houston the tax-taker will collect for the community a considerable portion of that new property which a community grows with and adds to the value of its lands. It is known that the erection of commercial buildings on valuable lands hitherto untimproved will be necessary in order that the owners may not lose money by reason of the largely increased tax valuations placed on such lands. It is known that citizens who erect such buildings, whether stores, factories or homes, will not hereafter be assessed upon them for more than one-third of their construction cost. Takers of unearned increment will be taxed increasingly, and two-thirds of the building tax burden will be taken off entering citizens who make unearned increment for the unenterprising. The Chronicle believes this system should be adopted by Harris county. We believe that if our vast area of idle farm land, most of it held speculatively for an unearned rise in value, were to be assessed as much per acre as cultivated farm lands, the owners of such untimproved lands would be forced either to put them into cultivation, or to sell them at fair prices and bring them into cultivation. Would not this be desirable? Would it not be good for Houston, and for a very great majority of all the people of Harris county? Would it not, by rigidly increasing the cost of land speculation, increase the commerce of this city, and remove the means of enrichment of a few speculators? We believe it would, and we recommend to County Judge Amerman and his associates, or to their successors if they take it on the eve of quitting office, that they study what the City Commission has done with the Somers System, and adopt it for the county."

THE TAX ASSESSMENT of any city is the most important function of government of that city, and it is usually performed with less efficiency than is the work of any other department.

How Mathematics Are Applied in Somers System Lot Computations

"How do you apply mathematics in the computation of lot values from street units?" is a question frequently asked by those who have become interested in the Somers System.

The following statement, prepared to answer this question, applies to the most valuable block in the city of Detroit, bounded by State street, Woodward avenue, Michigan avenue and Griswold street. The most prominent corner is occupied by the Majestic office building. The street units applied to this block were valued by members of the Detroit Real Estate Board. It is perhaps needless to state that the tax assessments bore no relation to the computed values. It will be seen, by those who are interested in mathematics, that a Somers System problem in valuation consists in two separate processes; one computing the gross value of the block with sole reference to the various influences of accessibility, the other process distributing the influences of accessibility to each lot in accordance with its size, shape and location. It will be seen from the summaries and diagrams accompanying this article that in this \$6,000,000 block, containing many complexities of size, shape and location of lots, the variation in the totals of the two processes was just \$7.

Walter E. Sweeting, formerly real estate editor of The Philadelphia North American, now employed on the staff of Somers System experts, in charge of the installation of the System at Augusta, Georgia.

No.	Lot	Value
1.....	726,746	
2.....	676,564	
3.....	666,385	
4.....	656,210	
5.....	646,035	
6.....	635,860	
7.....	625,685	
8.....	615,510	
9.....	605,335	
10.....	595,160	
11.....	584,985	
12.....	574,810	
13.....	564,635	
14.....	554,460	
15.....	544,285	
16.....	534,110	
17.....	523,935	
18.....	513,760	
19.....	503,585	
20.....	493,410	
21.....	483,235	
22.....	473,060	
23.....	462,885	
24.....	452,710	
25.....	442,535	
26.....	432,360	
27.....	422,185	
28.....	412,010	
29.....	401,835	
30.....	391,660	
31.....	381,485	
32.....	371,310	
33.....	361,135	
34.....	350,960	
35.....	340,785	
36.....	330,610	
37.....	320,435	
38.....	310,260	
39.....	300,085	
40.....	289,910	
41.....	279,735	
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43.....	259,385	
44.....	249,210	
45.....	239,035	
46.....	228,860	
47.....	218,685	
48.....	208,510	
49.....	198,335	
50.....	188,160	
51.....	177,985	
52.....	167,810	
53.....	157,635	
54.....	147,460	
55.....	137,285	
56.....	127,110	
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58.....	106,760	
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389.....	157,635	
390.....	147,460	
391.....	137,285	
392.....	127,110	
393.....	116,935	
394.....	106,760	
395.....	96,585	
396.....	86,410	
397.....	76,235	
398.....	66,060	
399.....	55,885	
400.....	45,710	
401.....	35,535	
402.....	25,360	
403.....	15,185	
404.....	5,010	
405.....	483,235	
406.....	473,060	
407.....	462,885	
408.....	452,710	
409.....	442,535	
410.....	432,360	
411.....	422,185	
412.....	412,010	
413.....	401,835	
414.....	391,660	
415.....	381,485	

30x82.68 feet to a corner in the alley, and a right-angle triangle 30x17.32x84.66 feet. The first division is worth \$9,000x30 or \$270,000, plus alley value (\$423.08x30) a total of \$282,693. The second division is worth \$9,000x32.20 (the percentage on the depth curve corresponding to a depth of 32.68 feet) or \$8,298, which is the front foot value, multiplied by the frontage of 30 feet or \$248,940. The value of the triangular division is ascertained by the use of Somers Zone Cards. These cards or tables give the value of the strips of land one foot wide and ten feet deep at varying distances from street frontages, and are worked out for every possible unit. In zoning, the lot is divided into a vast number of small sections and the value of each section is ascertained by means of the Zone Cards. By this process this triangular division is worth \$10,622.40 this must be added the alley value, which is \$423.08x84.66. Lot No. 4, therefore, is worth the sum of the following values:

Division 30x100 feet	\$270,000
Alley frontage of same	12,693
Division 30x32.68 feet	248,940
Triangular division (Zoned)	10,622
Alley frontage of same	14,860
Total value	\$566,915

Lot No. 5 takes in all the corner influence shown in the Somers Corner Table to amount to \$1,113,768 for a \$9,000-\$5,000 corner. It should be stated there is a small triangle cut from this lot owing to the fact that there is a bend in Woodward Avenue 30 feet from Michigan Avenue. A deduction is made for this loss of area, but as this lot has just as much frontage despite the bend, the deduction is made from the rear and not from the front of the lot. Whatever value is lost is taken from the rear or least valuable part of the lot. It is because of this fact that the deduction is made from the rear of lot No. 6. Deducting the corner square 100 feet each way from lot No. 6 leaves three divisions. One of these is 21x32.68 feet on Michigan Avenue, (\$5,000 unit). It is valued as an inside lot as described for part of lot No. 4, and is worth \$124,470. Another division is irregular in shape, having large frontage on Woodward Avenue, (\$9,000 unit), and narrowing to a small frontage on the alley. The only possible way in which to accurately compute its value is by means of the Zone Cards. They show a value of \$290,524. The third division is also irregular in shape. It is at the rear of both the first and second divisions, and has a frontage on the alley. This division is figured as a rear lot and from its value is deducted the sum due to the loss of area in the corner square. The net value of this division is \$24,435. This lot also has an alley frontage of 30 feet, so as in the case of the other lots the sum of \$12,693 (\$423.08x30) is added. Lot No. 5, therefore, is worth the sum of the following values:

Corner square	\$1,113,768
Division 27x32.68 feet (\$5,000 unit) ...	124,470
Irregular division (\$9,000 unit, Zoned) ..	299,524
Irregular division (\$9,000 unit)	24,435
Alley frontage	12,693

Total value \$1,574,890

Lot No. 6 has a frontage of 60 feet on Michigan Avenue (\$5,000 unit), but only is 45.56 feet from Griswold street, (\$4,000 unit). Therefore, a large part of the lot is within corner influence. In computing the value of lots within the influence of corners which are not right angles, use is made of transparent celluloid, upon which have been drawn with ink to scale, rhomboids not square. These rhomboids are drawn to all angles and subdivided into 100 rhomboids each of which contains 100 square feet, and measures 10 feet on one side. It is just as though the subdivided corner square were taken by opposite corners and pulled until it was so distorted in shape that its opposite angles would be acute and obtuse respectively. As these scales are made for all angles it is only necessary to ascertain which angle fits the corner of Michigan Avenue and Griswold street, and then to make the computation in the regular way. The angle (No. 6½ in this case) having been selected it is found that a large part of the rear of the lot is outside corner influence. This irregular division is Zoned, and amounts to \$181,276. This lot has an alley frontage of 64.66 feet, which is worth \$423.08 a foot, or \$27,352. Therefore, lot No. 6 is worth the total of the following sums:

Division within corner influence	\$170,231
Division extending to alley (Zoned)	181,276
Alley frontage	27,352

Total value \$328,858

Lot No. 7 takes the remainder of the corner influence amounting to \$432,979. To this is added 102.20 feet at \$423.08, or \$43,240, giving

a total value of \$476,219. Some of the corner influence extends into the alley, but the rules by which computations are made provide for such cases by stopping the corner influence at the line of the alley. This is because the value of an alley is not enhanced by having an outlet near a corner.

Lot No. 8 measures 109.44x126.80 feet, of which 84x100 feet is within the influence of the corner of Griswold and State streets (units \$4,000 each). The value of that part of the lot within the corner influence is first found in the regular way; it amounts to \$146,120. Then a straight computation is made of the remaining frontage of the lot by its total depth (76.44x126.80 feet) as previously described. Its value is \$330,699. This leaves a section in the rear of that part of the lot affected by corner influence. The value of this section is computed by referring to the depth curve and finding the difference in the percentage between the line parallel to State street at depths of 66 and 100 feet. This percentage of the unit 16.79, is then taken and the result multiplied by the equivalent of the frontage of the lot, which produces a value of \$17,999. This division of lot No. 8 is figured from the State street frontage because it is nearest that street. A part of the upper right-hand corner of lot No. 8 falls under the influence of both State and Griswold streets. This results in somewhat enhancing the value of a few square feet beyond the back corner of the 100 feet corner square. This is known as overlap, and in this case amounts to \$1,050. It is calculated from tables similar to the Zone Cards. To these figures must be added \$99,990 for alley frontage. Therefore lot No. 8 is valued at the total of the following sums:

Division 84x100 feet in corner influence ..	\$146,120
Division 16x126.86 feet	330,699
Division in rear of part of lot in corner influence	17,999
Overlap	1,050
Alley frontage	99,990

Total value \$596,818

Lot No. 9 takes in squares 1 to 60 in the \$9,000-\$4,000 Somers Corner Tables and six-tenths of squares 61 to 70. This value amounts to \$467,830. In the rear of the corner on State street is a part of this lot measuring 35.36x66 feet. It is calculated as an inside lot from the unit of \$4,000 on State street for a depth of 66 feet, and has a value of \$118,358. At \$423.08 the value of alley frontage amounts of \$27,924, making a total value of \$604,112 for lot No. 9.

It will be noticed that the angles in lots Nos. 8 and 9 are not right angles. The deviation is so slight, however, as to in no way affect the values and computations are made as if for rectangular lots.

In making the recapitulations to ascertain the gross value of a block, in order to furnish a check upon accuracy of the lot computations, the four corners are figured first. By referring to the \$9,000-\$4,000 Somers Corner Table it is found that Division A, at the corner of Woodward Avenue and State street, is worth \$1,071,540; from the \$9,000-\$5,000 Somers Corner Table, it is found that Division B, at the corner of Woodward Avenue and Michigan Avenue, is worth \$1,113,769; from the \$5,000-\$4,000 Somers Corner Table it is found that Division C, at the corner of Michigan Avenue and Griswold street, is worth \$603,210 (deduction having been made from the total corner value for that part of the corner influence extending into the alley); and from the \$4,000-\$4,000 Somers Corner Table that Division D, at the corner of Griswold and State streets, is worth \$604,000.

Division E is a part of the alley near State street, extending to a depth of 60 feet, the frontage, of course, being 20 feet. Its value is computed in the same way as would be that of an inside section fronting on State street. Its depth is figured to 60 feet only because beyond this point the influence of the \$9,000 unit on Woodward Avenue exceeds that of the \$4,000 unit on State street. Its value is \$63,600.

Division F is a large inside section fronting on Woodward Avenue, and figured to a depth of 140 feet, taking in the alley because the force of the \$9,000 unit extends that distance. Its value is \$1,064,250.

Division G is that part of the alley between Divisions E and F. It measures 40x20 feet, and is figured from \$9,000 unit on Woodward Avenue. Division H is figured as an inside section 30x82.68 feet from the \$9,000 unit on Woodward Avenue. It is worth \$248,940.

Division I also is an inside section, measuring 27x82.68, and is figured from the \$5,000 unit on Michigan Avenue. Its value is \$124,470.

Division J is irregular in shape, but by multiplying the base by the average altitude (30x25 feet), and taking into account the distance from

Woodward Avenue, it is figured as an inside section without street frontage from the \$9,000 unit on Woodward Avenue. From the value of this section is deducted a sum proportionate to the value of the area lost in the corner square (Division B) by the turn in Woodward Avenue.

Division K is an inside section 35.36x66 feet, figured from the \$4,000 unit on State street. Its value is \$118,358.

Division L is a section without a street frontage in the rear of Division K, extending to a line 100 feet from State street. Its value is \$17,999.

Division M is an inside section between Division J and the alley extending into Griswold street. It is figured with a frontage of 76.44x126.8 feet to the line of the alley from the \$4,000 unit on Griswold street; and is worth \$330,699. Division N is a part of the alley extending into Griswold street and is figured as an inside lot from the \$4,000 unit on Griswold street. It is valued at \$62,200.

Division O is irregular in shape, and its value, \$10,622, is ascertained by means of the Zone Cards, from the \$9,000 unit on Woodward Avenue. Division Q is irregular in shape and its value \$131,276, being figured from the \$5,000 unit on Michigan Avenue, by the Zone Cards.

Division R, which is a portion of the alley, is irregular in shape, and in order to ascertain its value, \$40,977, it was necessary to figure it by means of the Zone Cards from the \$4,000 unit on Griswold street.

Division S, also a part of the alley, and of irregular shape, was figured by means of the Zone Cards from the \$9,000 unit on Woodward Avenue. It is worth \$41,637.

Division T is triangular in shape, comprises what is known as the overlap amounting to \$1,050. This division lies altogether within the lines of Division M and its value is not independent of the value of Division M (\$330,699), but is in addition thereto. The \$1,050 is the amount of value added to this triangle by reason of its proximity to the \$4,000 unit on State street and above the value it obtains by reason of its proximity to the \$4,000 unit on Griswold street.

NEW JERSEY STUDY OF LAND ASSESSMENTS

Governor Woodrow Wilson of New Jersey has recently appointed, under authority of a legislative joint resolution, "a Commission to investigate present methods of making assessments for taxes throughout the State, and report whether changes are desirable." The findings and recommendations, if any, shall be reported to the next session of the legislature.

The resolution provides that the Commission shall consist of the President of the State Board of Equalization of Taxes, one member from the Senate, one member from the House of Assembly, and two citizens of New Jersey, to be appointed by the Governor. The Commission is to hold at least one public hearing at each county seat in the State, for the purpose of discussion and has the power to compel the attendance of witnesses by subpoena, and to punish them for failure to attend or testify. The members of the Commission are to serve without salary, but to pay expenses and clerical help an appropriation of \$3,000 has been provided.

The personnel of the Commission is as follows: Senator Carlton B. Pierce, of Union county, introduced the resolution; chairman, Frank B. Jess, President of the State Board of Equalization; Assemblyman Albert R. McAlister, Cumberland county; A. C. Playell, of Plainfield, Secretary of the New York Tax Reform Association; Thomas B. Usher, of Hudson county. William J. Keohan is the secretary, and the headquarters of the Commission are at 15 Exchange Place, Jersey City.

ASSESSORS are but human; if any citizen thinks he can do the job of assessing better than the average assessor, he ought to have the chance of trying. He would find that to do work without proper tools will be just as impossible as in the case of the assessor. No public official is compelled to do as much and as important work without adequate tools with which to do his work as is the assessor.

PRICE does not necessarily indicate value; the best that can be said of price is that it indicates the opinion of value of two people, the buyer and seller.

Dean J. T. Holdsworth of Pittsburg Discusses Real Estate Assessments

Professor J. T. Holdsworth, Dean of the School of Economics, University of Pittsburg, makes the following observation in a recent paper that he prepared on the assessment of real property: "Though proper and equitable assessment of real estate in our cities lies at the base of all municipal finance, scant attention has been given to it until the past few years. Land and improvements are being assessed in practically the same haphazard way they were half a century ago."

That expresses the situation exactly. No function of local government is as important as that of the assessment of real property. It is the basis for every other municipal activity. Yet the methods employed for that important function have remained practically unchanged in most of our American cities.

The usual method followed, even in the larger cities, is to give the Assessor a few maps, the most inaccessible office room in the city hall, a few tables and chairs, a few lead pencils, some call-cover books, and a clerk or two, and expect him to sort out and value all the differing items of value in his city.

What can the average assessor do but copy as much of the last assessment as he can "get away with," walk a few times around some of the buildings, say that land known to be worth \$100 a foot is worth \$40—"for the purposes of taxation"—and let it go at that?

Take a city of 200,000 population. Such a city has probably 70,000 pieces of ground separately owned, and practically no two of them alike in all particulars—at least no two in the more congested parts of the city. Such a city has perhaps 40,000 structures, practically no two alike. Here are 110,000 items of value, which the Assessor is supposed to "view," pass judgment upon as to value, and write it down in some books, with the help of such clerks as the City Council, grudgingly grants him as to numbers and willingly flits as to persons.

The work is naturally badly done and the citizens take it all out on the Assessor, as if any one of them could do any better under the circumstances. The really wonderful part of it is that some of the Assessors do as good work as they do. And then the pay that is given to Assessors is ridiculous—although it may be large enough as long as the Assessors are not allowed to improve their methods. The Assessors of the cities of Cleveland, Cincinnati and Columbus get \$150 a month for six months; we know of a city in Pennsylvania of nearly 100,000 people whose Assessors draw about \$1,000 a year and are expected to put in their full time.

However, good salaries will not cure the assessment difficulties. In one of the largest cities of New England the Assessors get \$3,500 a year, and the only method of assessing that they show improvement on is in the keeping of their office records. The Assessors of Philadelphia get \$3,500 a year, but they are assessing property just as they used to do when the villages that now make up the city of Philadelphia were in existence.

Therefore, it takes something besides maps, white paper and a lead pencil and adequate salaries for the Assessors properly to assess property.

Take the city we mentioned above, having 110,000 items of value within its borders. Until the Assessors have some way of classifying all of the facts of the 110,000 items that are similar until they get at some method of analyzing the factors that enter into site values, until they have some realization of the depreciations that attend the life of every structure in a city, they will never do very much better work than they do now.

Some features of the work of assessment are the work of experts, much of it is not. The chief function of an Assessor is to exercise judgment. That is the theory of the law—the delegating to some one authority the final judgment of the value of the land and buildings belonging to all the citizens of the town. It is not because the Assessor is the only one in the town who has an opinion, but the lawmakers, perhaps unconsciously, recognize that there is apt to be a difference of opinion, and therefore they authorize all of the citizens or some official of theirs, to pick out one or more men to act as umpire as to these differences of opinion, and make an estimate that is made final. So the Assessor uses his own knowledge, if he has any, and what

little he can dig out of other people and makes the assessment—and all of the rest of us do the kicking.

Yet what one of us would attempt the job of setting down the values of 110,000 items of value, no two alike, so that they would be in proportion to each other and in proportion to the value of all together, without some fear and misgiving? And who of us could complete the task any better than the Assessors whom we criticize? Not one of us!

Assessors ought to be confined to their primary task—the exercise of judgment. The task of simplifying and classifying, so that the Assessor can not only exercise judgment in the easiest fashion possible, but get other people to help him by making it easy for them to exercise their judgment and criticize him, is the task of experts. Experts in doing all of this exercise judgment no more than the expert book-keeper indicates the price of cloth for the merchant for whom he keeps books.

Another function of the expert is to formulate some method by which the judgment of the Assessor may be equitably measured out to all of the property owners alike.

In the use of the Somers System such is the program. The Somers System expert classifies and simplifies; he shows the Assessor how easy it is for him to exercise his judgment upon units of quantity for both land and buildings. The Assessor exercises his judgment, and he may so do it that he uses as well the judgment of his fellow citizens. The Somers System experts then by the aid of the Somers System mathematical tables and devices, measure out the judgment of the Assessor as he expresses it upon the units of quantity. In the matter of buildings, in addition to the exercise of judgment of value of new construction, the Assessor is shown by the expert how to exercise his judgment on the matter of depreciation, which is a department of assessing quite apart from all other acts connected with the task.

Yes, Professor Holdsworth was right when he said assessments are made in the haphazard fashion of half a century ago. The Somers System has solved the assessment problems of the day, and slowly but surely it is making headway. In the educational work that has been found necessary in connection with the introduction of the Somers System, the promoters of the System have done more to spread the principles of accurate valuation than has any other person or association in the country. In the next decade the function of assessing will be brought to as high a standard as are other municipal departments, and it will be due to the use of the Somers System and its principles.

The following letter addressed to Dean J. T. Holdsworth, of the School of Economics, University of Pittsburg, is self explanatory, except to say that it was brought out by an admirable report by the Dean in the June issue of The National Real Estate Journal of Chicago. What is set forth in this open letter is so clearly expressive of just what the Somers System is and is not, and in addition answers so many of the objections that are often raised by those who are critical because of their lack of information or are critical because of their endeavor to "put the Somers System out of business" for their private reasons, that it has been decided to reprint it in this issue of The Somers System News:

Dean J. T. Holdsworth,
Cleveland, Ohio, June 13, 1912.
School of Economics, University of Pittsburg,
Pittsburg, Pa.

Dear Sir:—
Your report on "Taxation," printed in the June number of the National Real Estate Journal, is a valuable contribution to the solution of the assessment problem. When you say: "Land and improvements are being assessed in practically the same haphazard ways as they were a half century ago," you but state the truth.

However, when you class the Somers System with the Hohmann-Neill rule, and label them both as claimed panaceas, you are doing the Somers System a grave, though probably unintentional, injustice. Until a more scientific system is devised, you say, thus intimating at least, that the Somers System is not scientific enough, which might easily mean that it is not scientific at all.

All of which leads me to make the following observations: Somers System is not put forward, and never has been, as a panacea.
2. The Somers System does not value anything, based upon the well recognized laws of the effect of the usefulness of streets upon contiguous areas or sites, of the effect of depth upon what we finally call value, and the mathematical relation of value

of sites affected by the same street influences.

4. The use of the Somers System is the only system that compels the establishment of a unit of quantity for every site—one of the fundamentals necessary for every expression and comparisons of opinions of value.

5. The Somers System is the only system for the assessment of sites that makes it possible to get at the real community opinion, which is the only safe guide for final valuation by the assessor. The Somers System is the only system that has ever been used for actual assessment work in more than one city. Seven cities have used it, and the eighth is now installing it.

7. The Somers System assists the assessor to come to final opinion of value, and it provides for the application of that opinion upon a mathematical basis, rather than by guess. To the extent that Mr. Somers has solved the mathematical relation of value into usable terms—to that extent the system is scientific. That he has thus accomplished this, we have only to point to the work done in several cities, and to say that Mr. Somers' tables solve more than 90 per cent of the assessment problems when actually tried.

I quote the following sentence from your paper, which states a simple truth:

"Everyone is familiar with the wide differences in the estimates made by real estate experts when property is to be condemned for public use, or exchanged in private transactions."

And yet in the next sentence you make the following statement:

"The Board of Assessors should invite and receive hearty co-operation of real estate experts in making assessments showing 'wide differences' would not be of special value to the assessor; or if they would be, opinions showing slight differences, which could be obtained, would be of much more value."

It is true that real estate experts differ widely under their present methods, as you have observed, but these same experts and themselves differing very slightly, if at all, when they use the Somers System methods. This is not because the system furnishes any part of the judgment of value, for it does not, but because it furnishes a method by which opinions of value may easily be expressed, interchanged and criticized, and because it provides a definite and mathematical method of applying that opinion or judgment of value. We have demonstrated the truth of this statement in more than 25 American cities, and the outcome has always been as above mentioned. The differences in the opinions of value among real estate experts, when the Somers System is used, usually disappears, or dwindles so that it is easily and satisfactorily compromised, and where any difference persists it is scarcely ever over 10 per cent between the highest and lowest.

Recognizing as true your first statement above quoted, it is manifestly futile to attempt to carry out your recommendation until some method is devised to provide for the expression of judgment upon a common basis, and for the application of that judgment by mathematics instead of by guessing. This guess at the mathematical relation of value among sites is the scientific method that is fundamental yet devised that Somers System is the only method which solves this difficulty, and eliminates this guess in more than 90 per cent of the assessment problems.

Very truly yours,

E. W. DOTY,
Manager Tax Valuation Department.

WHERE THE SOMERS SYSTEM HAS BEEN USED

The Somers Unit System of Realty Valuation has been used for assessment purposes in the following cities, since 1910:

Cleveland, Ohio.
Columbus, Ohio.
Springfield, Illinois.
East Saint Louis, Illinois.
Joliet, Illinois.
Denver, Colorado.
Houston, Texas.
Lancaster, Wisconsin.
Beaumont, Texas.
Augusta, Georgia.

The first four cities in the above list used the system for complete assessments. Joliet and Denver used the system for the assessments of their business districts only. Houston used the system for the whole city; Beaumont, Texas, and Augusta, Ga., are just now installing the system for complete assessments. Lancaster is the smallest city that has used the Somers System; it was used in the business center of that place.

AN ASSESSOR requires something besides card indexes, maps, and fine office furniture to make an adequate assessment. Most city fathers think that all that a man needs to be an assessor is a lead pencil, some blank paper and a "field book." Some assessing officials think they have a proper system for their work when they can show filing cabinets, up-to-date maps, plenty of card systems and a well ordered business office. The results in either event are about the same—inequitable assessments, unless supplemented by a knowledge of the fundamentals of land value and a real system for applying that knowledge.

The Somers System News

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THE SOMERS SYSTEM NEWS

The fundamental thing in the administration of public business is the tax assessment. If the assessment lacks equity, the whole structure of government rests upon an insecure foundation, and justice fails.

Assessments of realty are everywhere inequitable. This is universally acknowledged to be the fact. Then there must be something fundamentally wrong about assessment systems, entirely aside from any question of the ability or honesty of the men charged with the duty of administering the assessment laws.

Public officials are everywhere asking the question, "What is the matter?"

To answer this question is the primary purpose of the establishment of The Somers System News.

But we shall not stop at answering the question academically. We shall tell the American people how their land assessment inequalities can be cured.

In order to do this it will be necessary to controvert many wrong theories held by men of good intention. It will be necessary to prove that these theories are wrong in order to construct foundations that will support an edifice of truth.

It will be necessary to show that there has been little correct thought about the origin of site values in land, and less constructive work in the application of those principles for the equitable distribution of the tax burden; and that W. A. Somers is the only man who has thought constructively along those lines.

It will be necessary to show that some of the men who hold high position in consideration of the public as experts in taxation matters are in fact the agents of reactionary interests; whose work, instead of being disinterested and scientific, consists largely in the promotion of mental confusion concerning subjects of taxation. They spend their time, and the time of those who are influenced by them, in aimless discussions. Their reforms consist in ponderous dissertations concerning the evident things. Much is made of the separation of land and buildings, and of improved record systems. Any of these reforms could have long ago been worked out by any competent accountant. Of course you cannot correctly value realty without separation of the different elements of value, but the discovery of this fact, and the application of it, does not constitute an heroic performance.

A little idol-smashing will do a great deal of good, when Allen Ripley Foote and A. C. Pleydell are shown in their true habiliments, not as reformers, but as tax deforers. It may be that some well-meaning gentlemen who have been blind in their devotion to these gentlemen, will see the true light, and that these men, among whom are prominent members of State Tax Commissions and Boards of Assessors, will have the courage to become progressive instead of reactionary officials, and to act in the interest of all the people.

While it is sometimes necessary to first demolish brush-heaps in order to clear away the place for the foundation of a structure, the purpose of The Somers System News is not to stop there. We shall make this publication a forum for the discussion of all of the problems of land valuation, and thus make it useful to Tax Commissioners of States and Cities, and to other public officials; to teachers and students of

economics; and to those who own or sell or manage real estate subject to taxation. It is true that the publication will be what is known as a "house organ." Its ultimate object is to promote interest in the engagement of the services of Somers System experts to equalize realty assessments, and to conduct investigations of such assessments. But before such engagements can be negotiated, and as a corollary thereto, our experience has demonstrated the necessity for the destruction of brush-heaps, in the way of reactionary influences, the dissemination of true principles, and the overcoming of prejudices. There are a few tax-dodgers in every community who cannot be converted to approval of the application of a system that makes their further enjoyment of special privileges impossible. But the only way these privileges can be abolished is to show the community clearly how to discover inequitable assessments and how to make tax assessments that are equitable. When a community possesses this knowledge, the tax-dodger will be eliminated, and equality and justice, with all the attendant benefits to the community at large, will prevail.

This may look like a large, man-sized undertaking for a mere business house-organ—and perhaps it is. We don't expect to convert the world in a minute, or even in a year. We shall hit a few heads, but we won't stab from behind. We shall advocate what we believe to be true principles, and we shall defend those principles with all our might, but we shall never intentionally show antagonism towards anything except Wrong, or towards anyone except the Doer of Wrong. We shall try to promote the Right and the Truth, and if we fail in this effort it will be because we have no conception of what constitute Right and Truth.

WHAT IS THE SOMERS SYSTEM?

The Somers Unit System of Realty Valuation is, primarily, a system of computation.

In a collateral sense it is much more than that. There can be no computation without a basis for that computation. That basis must be a unit of quantity that is constant. The Somers System therefore must have first a unit of quantity. The collateral effect of having some unit of quantity is to make it easier for the expressions of opinions of value in the first place, and to the extent that the Somers System requires a unit of quantity, the Somers System is more than a system of computation.

For the ordinary expressions of value of land in cities, there is no recognized unit of quantity. We say land is worth \$500 a front foot on a certain street. Until we know how deep that land is, whether there is any irregularity in the lot's side lines, whether there is an alley or not, whether it is at or near or remote from a corner, we don't know exactly what the \$500 per foot front means as compared with the values of other frontages that we think we know something about.

If we say a certain lot is worth \$2 per square foot we are worse off than in the first illustration, for not only are all the factors therein enumerated unknown, but in addition we don't know how many square feet in the particular piece that is thus valued, nor do we know how much of the area is remote from the street line and how much is near the street line.

All of these factors have to be specially referred to when we talk in the present language of land valuation. When we come to compare the value of a piece of ground that we agree is worth \$2 per square foot with the value of the piece next door which is of a very different size and shape, we may find that in the case of the second piece \$1 per square foot is exactly the same judgment of value as the \$2 in the case of the first lot.

Examples of the futility of attempting to exchange opinions of value under the present modes of expression might be continued indefinitely. Comparing the values of any two contiguous irregular sites in the business district of any large city, would prove the inadequacy of the present methods of expression.

In everything that is bought and sold except land in cities and towns, we have a unit of quantity. Would it not be the height of wisdom to establish one for expressing land values? It would simplify the whole assessment tangle, even though there were no adequate methods of computing that judgment into various sizes and shapes that we actually find in cities, large and small.

Before the computation methods of the Somers System can be used at all it is necessary to agree upon such a unit of quantity, upon which all judgments of site value must be expressed. A unit of quantity must have two

qualities: It must be small enough to value easily and large enough to make progress in measurement. Every unit of quantity now established has these two qualities.

The Somers System establishes this unit of quantity for land valuation as a piece of ground fronting one foot on the street and 100 feet deep, called the unit-foot. A perfect definition of the unit-foot is as follows:

A unit foot is a frontage of ground one foot wide and 100 feet deep, located in the central section of a block at a distance from any street corner or other influence that might affect its value, other than that which it obtains by reason of access to the life and business of the city through its own frontage.

Even if the establishment of this unit of quantity were the only feature of the Somers System, its use would greatly improve assessments. This was demonstrated in several cities in Ohio during the assessment of 1910, notably, Toledo, Sandusky, Dayton, Youngstown. These cities among others either did not have the money to install the System or were dominated by assessors who lacked the courage of their convictions and did not use the Somers System for the computation of lot values, but did learn all about the Somers unit-foot and placed most of their judgments of values of land upon the basis of the Somers unit-foot. Where they fell down was in computing that judgment for the various sizes and shapes. The crude methods that they had to use for their computations resulted in great loss of values from the tax duplicate. This was noticeable in the case of Toledo. Toledo is almost as large as Columbus, Ohio, which was assessed under Somers System methods. Its tax duplicate ought to be almost as large. Yet Columbus found that it had \$180,000,000 worth of land and buildings while the found \$139,000,000. In other words while the assessors of the two cities used approximately the same methods of expressing judgment of value Toledo lost over \$80,000,000 of values that really existed in that city in attempting to compute their judgment by crude methods, while Columbus used the best methods and lost none of its value.

In passing it might be noted that the tax upon that \$80,000,000 at 1 per cent for four years would amount to about \$1,200,000, which represents what the treasury of the city of Toledo, and its county of Lucas, and small portions for the State, lost by using crude methods instead of scientific methods offered by the Somers System.

It will be seen by this illustration of Columbus and Toledo, that the judgment of value was expressed in practically the same way and with approximately the same efficiency. All of the Somers System that had up to this point been used by either city was the unit of quantity. But from this point the methods differ. In other words before the Somers System as a computation system is used, the exercise of judgment is complete. Which leads us to this observation, important and not to be overlooked or forgotten:

The Somers System does not appraise; it is primarily a computation system for ascertaining the values of lots by comparing them accurately and mathematically with the value of an agreed unit of quantity.

Every person who has much or little to do with the appraisal of land values recognizes, either consciously or unconsciously, that there is a law of appraisal which may be stated as follows:

There is a mathematical relation between the values of all sites affected by the same street influences.

It must be apparent that if the value of a given piece of ground is arrived at—no matter what method therefor is employed—another piece of ground just like it, and affected by the same street influences, must be worth exactly the same. The mathematical relation of the value of two such pieces of property is easily seen. That such a mathematical relation exists between values is self-evident. That there is a mathematical relation between the values of two sites, of dissimilar size or shape, but affected by the same street influences, must be as apparent and self-evident as in the first illustration. At any rate all students of such matters agree that this is so; every assessing department in the United States that has any standing whatsoever, recognizes this fact, and attempts to work out mathematically what that relation is.

THERE is a mathematical relation between the value of any two sites affected by the same street influences. That relation, being mathematical, ought to be ascertained by mathematics, and not by guessing, as is now the habit of Assessors and land appraisers.

Central Boston Assessments Analyzed By Somers Mathematical Computations

One of the most interesting assessment studies is found in the block bounded by Tremont, School, Washington, and Bromfield streets in the city of Boston, Mass. This block is one of the oldest city divisions in the United States. It has been in the business center of its city for generations. Most of the irregular lot lines come down from pre-revolutionary times. It presents about as complicated a situation as is to be found anywhere.

In studying the assessment as was actually made by the Assessors for 1910, it is found that there is a noticeable attempt on their part to

is somewhat descriptive of the Somers System, and includes some observations by Mr. Somers, who deduced the figures that are to be found upon Diagram A, which is used here through the courtesy of the Editor of The Boston Common. The article by Mr. Pollock is as follows: "It would require careful consideration and much publicity, with the co-operation of property owners and real estate experts, properly to value the units upon the business section of Boston bounded by Tremont, School, Washington, and Bromfield streets, so as to make these values proportional, and the various lots equally pro-

System does not value land, but that it is a system of computing the value of land based upon some one's opinion of the value of the usefulness of the streets. In other words, it is a computing scale by which it is possible to measure out to the various parcels of land the proportionate share of value due to each parcel by reason of its location, its size and its shape. Judgment of the value of the unit is determined, first comparatively, through a knowledge of the value of the different streets as used by the community. Then this value is expressed in dollars. After the dollar unit values have been agreed upon, then the Somers methods of computation are used to compute the dollar value of each lot.

"Thus it will readily be seen that if the unit values are wrong severally, or in comparison one with another, then the dollar value of the different lots will be wrong; although the various lot values would still be mathematically proportional to each other.

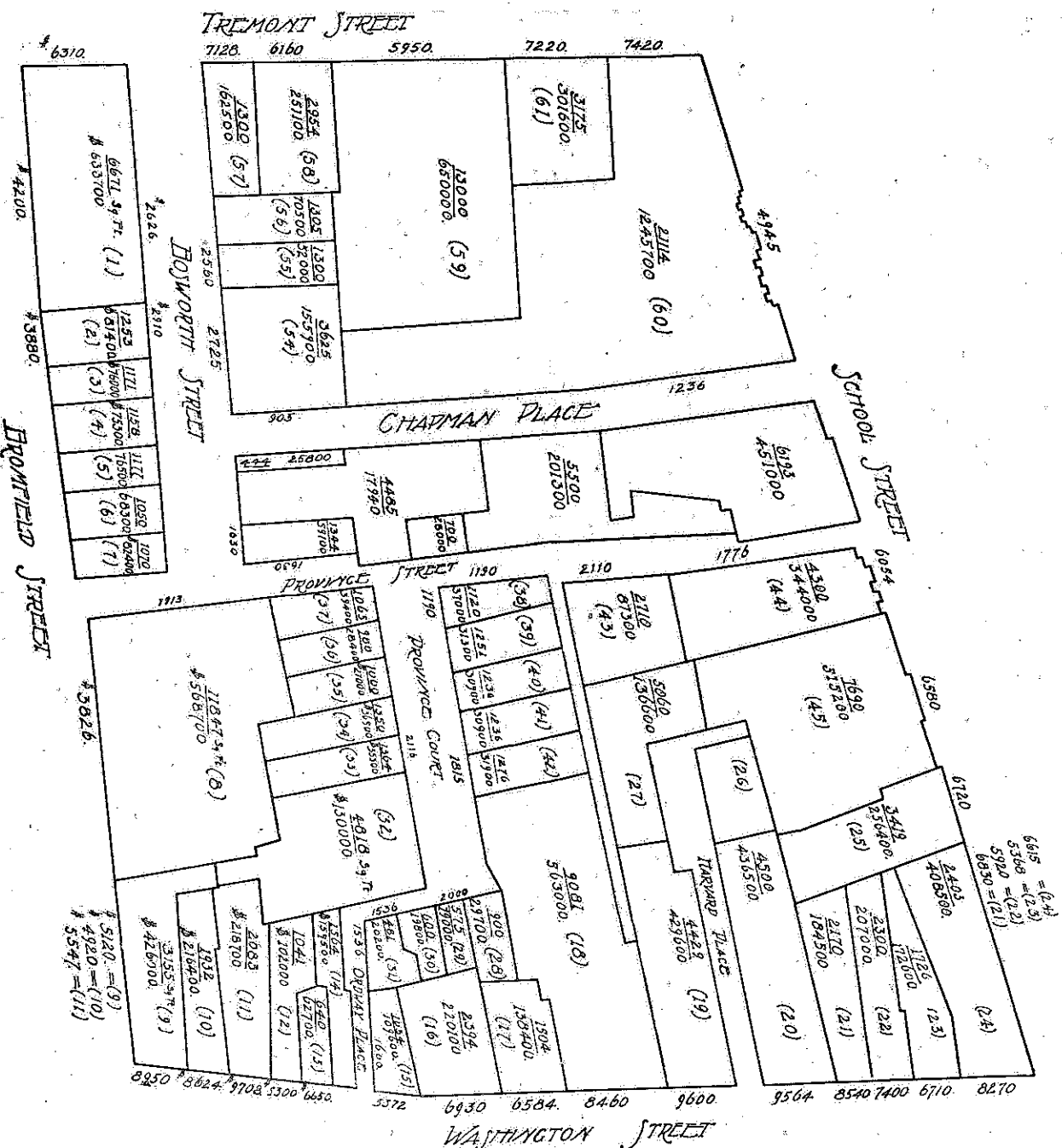


DIAGRAM A—
Showing lot lines in block bounded by Washington, School, Tremont and Bromfield streets, Boston, Mass.
Figures in parentheses indicate our lot number; figures above each horizontal line the number of square feet; the figures below the assessment of the area for 1910; the figures outside the lot lines and in the streets indicate the assessment of the contiguous area a deduction to the value of a common unit of quantity—the Somers Unit-Pool.

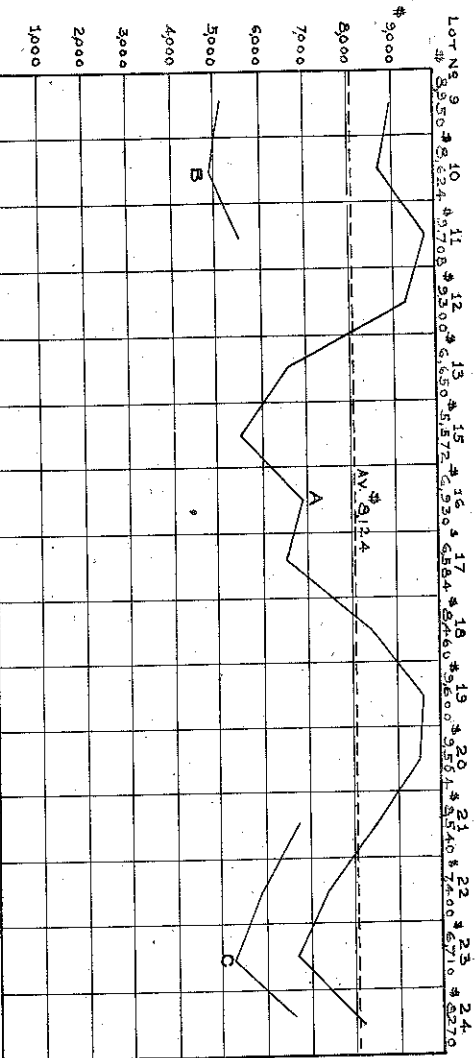
carry out the law of mathematical relation of value between lots affected by the same street influences. Wherever the lot lines run at all regularly this mathematical relation is evidently figured by mathematics. This is noticeably true in the case of the small lots in Province Court and on Bromfield Street. But when it is necessary to compute the mathematical relation of value for the irregular shapes on Washington Street and in other parts of this block, the method that the Assessors were compelled to use falls down.

Before analyzing this assessment in detail we quote first the article written for The Boston Common by Walter W. Pollock, President of the Manufacturers Appraisal Company, and printed in The Common for June 24, 1911. The article

portional. Under the Somers System it is desirable that the principal business section all be considered at the same time, and that the value of the units should not be finally determined until the public has had the opportunity to discuss the tentative values, both through private study and through public meetings. "It is, therefore, impracticable, by a cursory study of the subject, to determine the proper unit values to place upon the streets surrounding the complex Boston district under consideration, and consequently impossible to make, without more exhaustive study, what would be a fair test of the efficacy of the Somers System for the computation of the value of the various lots comprised in the district referred to.

"It should be remembered that the Somers

"For the purpose of further explaining the utility of the Somers System in measuring the values of the different lots for assessment purposes, the fact should be emphasized that its promoters do not in any degree nor to any extent usurp the prerogative or the authority of the legally designated assessment authorities to determine the value of land for purposes of taxation. Under the usual assessment method the assessor tries, with the best of intention and with the use of all the information he can gather, to determine the value of each lot independently. If he makes an effort to harmonize his judgment of the value of one lot with the value of another lot, he finds himself in trouble. "So when the Somers System is used in making an assessment, the taxing official devotes his



B—The effect of judgment of land value when applied to individual lots of varying sizes and shapes. Lot No. 9 fronts on Washington street (Boston), corner of Bromfield street, and Lot No. 24 fronts on Washington street at the corner of School street. The line A exhibits graphically the course of judgment of the effect of Washington street at each lot. Of course the effect of this street is constant rather than irregular.

efforts to determining the value of the streets and expresses that judgment by valuing a unit foot of quantity that is always the same. It is much easier to obtain the information that is necessary to determine proper unit values than to obtain a consensus of opinion regarding the values of individual lots. Where supposedly well-informed persons will differ from 20 to 100 per cent in their judgment of the values of individual lots, it is, possible, by the use of the Somers method, to secure substantial agreement as to the value of units.

"After the units have been valued then the computation of the various lot values is a mathematical operation. It is not meant by this that the Somers System will show values of abnormal lots having peculiar local conditions. It will, however, show the normal mathematical relation of all the lots affected by the same street influences. A mile or system is most valuable that solves the largest number of problems. If there is some local influence outside of the normal street influence, whether that influence be of enhancing or detracting effect, that influence should be separately considered in its effect upon values.

"The best that can be done with the Boston map handed to Mr. Somers is to take the present assessed values of the different lots, and to compute therefrom the unit value which would be required to produce the assessed values. These deduced unit values are placed on the map in the streets, opposite the respective lots, and show a wide difference in the values so deduced, for lots having the same street accessibility. Mr. Somers, who has given his personal attention to the mathematical work involved in this Boston map, writes of the problems involved therein, as follows:

Dealing with Washington street you will notice that the unit values run from \$9,700 to as low as \$8,500 and on Tremont street from \$14,400 to \$3,900. On School street they run from \$8,500 to \$14,900, on Bromfield street, from \$8,500 to \$18,500; on Frothingham street, from \$5,000 to \$12,200; on Bowdoin street from \$12,200 to \$2,000; on Conway place, from \$1,500 to \$1,200; on Chapman place, from \$1,200 to \$1,900. Some of the differences may be partly accounted for by the small size and odd shape of the lots, and there may be some on account of errors in list or on map, which in some cases do not agree.

I have worked out the unit values on that part of the block bounded by Tremont street and School street, Chapman place and Bosworth street, and using Tremont street at \$7,000, School street at \$800, get the following results:

Lot	Present	Sonnets
1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100
11	100	100
12	100	100
13	100	100
14	100	100
15	100	100
16	100	100
17	100	100
18	100	100
19	100	100
20	100	100
21	100	100
22	100	100
23	100	100
24	100	100
25	100	100
26	100	100
27	100	100
28	100	100
29	100	100
30	100	100
31	100	100
32	100	100
33	100	100
34	100	100
35	100	100
36	100	100
37	100	100
38	100	100
39	100	100
40	100	100
41	100	100
42	100	100
43	100	100
44	100	100
45	100	100
46	100	100
47	100	100
48	100	100
49	100	100
50	100	100
51	100	100
52	100	100
53	100	100
54	100	100
55	100	100
56	100	100
57	100	100
58	100	100
59	100	100
60	100	100
61	100	100
62	100	100
63	100	100
64	100	100
65	100	100
66	100	100
67	100	100
68	100	100
69	100	100
70	100	100
71	100	100
72	100	100
73	100	100
74	100	100
75	100	100
76	100	100
77	100	100
78	100	100
79	100	100
80	100	100
81	100	100
82	100	100
83	100	100
84	100	100
85	100	100
86	100	100
87	100	100
88	100	100
89	100	100
90	100	100
91	100	100
92	100	100
93	100	100
94	100	100
95	100	100
96	100	100
97	100	100
98	100	100
99	100	100
100	100	100

Lot	Assessment.	Valuation.
54	\$ 155.90	\$ 165.181
55	52.000	58.900
56	70.500	78.752
57	162.500	160.188
58	281.100	284.500
59	050.000	154.744
60	1,216.700	1,188.720
61	301.600	297.300

This shows an increase for the lots of \$127.75, and a decrease for three lots of \$97.62. By making School street and Chapman place a little higher and B, but this is only guessing at it, and investment by persons who have knowledge of the streets is the only satisfactory way to value the lots. You will notice that at the corner of Washington and B, the lots are higher than the lots on

On the corner of Washington and School streets, while even back to the fourth lot from the corner; while on the second and third lots are both lower than the corner and lower than the fourth lot, showing that no matter what rules were used, the differences cannot be harmonized. It is not clear whether the assessed values or the values computed from unit values assumed by Mr. Somers, are correct, or whether the entire set of values is more nearly correct, the im-

portant to consider in this connection is that, by the Somers computations, some of the logs are given at higher values than those given by the assessors, while others are computed at lower values. The variations are both ways, from two per cent up to about 20 per cent. It is in harmony with the judgment of the assessors by mathematical computations that the Somers System is flawed given in considering the undetected horizontal error by Mr. Somers, it is a fact that the horizontal error of a log 100 feet deep in the middle of the block, or at a point where there is no enhancement of value over that received from the street upon which the log-foot fronts, and disregarding any effect.

The Washington street frontage of this block presents the most interesting study. Here are 16 lots, no two of which are alike. Not only are they unlike in actual shape, but each is affected by some factor of value that affects no other lot, or affects it in a different degree.

It must be true that whatever the effect of Washington street upon the land value of this block, it is uniform for its whole length. That is, if all the lots were exactly the same size and shape, without alleys or "places" and without corners at School and Brownfield streets, the lots in that case would be of uniform value. It is in evidence that the Assessors' Commission is evidently the judgment of the Assessors.

because the judgment of lot values varies up and down all along the block and is approximately as high at the corner of School street as at the corner of Bromfield street. It must be remembered in using the figures along the streetline of Washington street, we are showing in

dollars the effect, in the judgment of the assessors, of Washington street upon one foot wide and 100 feet deep at each point. To state it another way, if a foot wide and 100 feet deep at lot No. 16 is worth \$9,930, then the lot itself is worth \$220,100; and if a foot wide and 100 feet deep at No. 15 is worth \$5,572, the lot itself is worth \$100,600. But manifestly the effect of Washington street on 100 feet of depth at lot No. 16 is not \$1,400 more than at lot No. 15. This discrepancy comes entirely in attempting to compare values of different sizes and shapes one with an alley effect and one without.

Diagram B graphically portrays these differences for the whole extent of the frontage on Washington street. The line A exhibits the broken effect of Washington street, whereas it ought to be constant at every part, the difference in values being entirely due to the different sizes and shapes and the various additional effects for corners and alleys.

The map D shows the differing effects of road widening on Washington street. The differences here, shown are slight, and of no very great consequence.

Line C shows the effect of School street as used by the Assessors upon the first four lots on Washington street, and it will be seen that the effect of School street is greater in the fourth lot from the corner than in any other lot, and less in the second lot from the corner than in any other lot. Whatever the effect of School street, it is really the same for all the lots on Washington street affected at all.

The dotted line upon this diagram shows the average of all the judgments of value expressed by the Assessors upon Washington street frontage, etc. Only one lot, No. 18, is figured anywhere near the average, and this lot is computed at \$336 per unit foot higher than the average for the sixteen lots.

one can observe the discrepancies of judgment more easily.

According to the judgment as shown by the assessment Washington street affects property \$226 less at Lot No. 10 than at Lot No. 9 and \$1,084 less than at Lot No. 11; at Lot No. 12 \$403 less than at Lot No. 13; at Lot No. 13 \$2,980 more than at Lot No. 15; at Lot No. 14 it is \$1,278 more than at Lot No. 16; at Lot No. 15 it is \$1,558 less than at Lot No. 16; at Lot No. 16 it is \$346 less than at Lot No. 17; at Lot No. 17 it is \$1,876 less than at Lot No. 18; at Lot No. 18 it is \$1,140 less than at Lot No. 19; at Lot No. 19 it is almost the same as at Lot No. 20, the difference being only \$46—a difference that would not be worth considering if it were the only difference found; at Lot No. 20 it is \$1,024 more than at Lot No. 21; at Lot No. 21 it is \$1,140 more than at Lot No. 22; at Lot No. 22 it is \$890 higher than at Lot No. 23; at Lot No. 23 it is \$1,560 lower than at Lot No. 24.

Manifestly these differing judgments of the effect of Washington street are not all of them true judgments. If these properties had been assessed upon the effect of Washington street upon them as they ought to have been, the effect of Washington street must have been first ascertained; the difference in final values would then have been based upon the difference, to be ascertained by mathematics and not by guessing, in the amount of Washington street each lot may have been said to have absorbed. This is entirely due to the size and shape and the relation of that size and shape to the street itself.

The chances are that the average of the various unit values deduced from the assessments comes pretty nearly being the value of the effect of Washington street upon a unit-foot. That being so it will be seen from Diagram B that Lots Nos. 9, 10, 18, 21 and 24 are valued slightly above their worth; that Lot No. 22 is valued slightly below its worth; that Lots Nos. 11, 12, 19 and 20 are valued very much below their worth; that Lots Nos. 13, 15, 16, 17 and 23 are valued very much below their worth, the greatest discrepancy being shown in Lot No. 15.

AUGUSTA, GEORGIA, USING SOMERS SYSTEM

Assessor E. B. Hook and the City Council of Augusta, Georgia, decided early in August, 1912, to revise the assessment of real property in that city by Somers System methods. The work began at once and is now in progress. It is expected that work will be completed by January 1, 1913.

After the first tentative unit map had been published in the newspapers, and meetings of citizens were being held, The Augusta Chronicle, under the heading of "Values in Augusta," published the following editorial (date of Sept. 1), which presents clearly and forcefully to the citizens of Augusta exactly what was expected of them and just what a real assessment of land values consisted of:

"We publish on another page this morning what is called a 'tentative unit map' under the Somers Unit System of Realty Equalization. This system is now being employed by the real estate assessing department of the city for the assessments for 1919.

“If every other claim for the system is as un-
maintained as its claim of publicity, and do-
ing things in the open, then Augusta ought to
have assessments well equalized next year. There
may be unique. It presents to the eye, in con-
crete form, a more complete idea of comparative
values in the business section of Augusta than
any of us have had before.

"While we have known in a general way how values differ on different blocks of the same street, and on different streets, we have not before had these differences spread out before our eyes for patient comparison and study. It is an interesting exhibit, and one worth our while to examine.

Many property owners are concerned in the territory which is embraced in this map. These units of value have been placed on the several blocks as the consensus of opinion of a considerable number of people—dealers in real estate, owners and renters—men familiar with the several streets, and their comparative value for business or residence.

"The values placed, as we understand it, are tentative values—that is, they are open to discussion, and can be changed if an error is shown to have been made.

"This certainly looks like a very fair proposition, and it would seem to be a matter both of public interest and individual interest that would appeal to us all to co-operate in securing the most equitable and accurate units of values on these blocks.

How Philadelphia Tax-Dodgers Prevented Equitable Assessments

For the first time in a generation the year 1912 found the city of Philadelphia with a "reform" mayor and administration in charge of its affairs. One of the first things that Mayor Rudolph Blankenburg and his advisors found was the appalling condition of the assessment of real property. For many years the tax rate had been fixed at \$1.50 per hundred dollars. So fixed in the minds of the people has this tax rate become that any administration would think twice before raising it. To increase the income therefore would necessitate an increase of the assessment. The borrowing power of the city was also found to be exhausted. This power is fixed at a certain percentage of the assessment. Therefore for two very important reasons, obtaining money enough for every-day operation, and extension of the permanent improvements of the city, a higher assessment appeared to the administration to be absolutely necessary.

It is an opinion held very widely in Philadelphia, so widely indeed that it may be said to be a fact, that as a class the assessment of dwellings and outlying property is approximately at full value, while business property and, including property are assessed very much below their real value. Therefore a horizontal increase in assessments throughout the city would be exactly the same as an increase in the tax rate. In other words, a horizontal increase in assessments would raise the assessments of more than two-thirds of the city to a point above true value. Either an increase in the tax rate or a horizontal increase in the assessment would but exaggerate the inequalities that have been so apparent to the citizens of Philadelphia ever since the Somers System demonstration in that city in 1910.

The discussion in the Philadelphia newspapers and among the leading business men in Philadelphia became very acute up to about the time that Mayor Blankenburg went to the country on his summer vacation, and the whole matter was left in abeyance until his return. In the meantime The Philadelphia Public Ledger has been continuing the agitation both in its editorial and news columns. There seems to be a general agreement of those who have participated in the discussion this summer, (not including President Simon Graetz of the Board of Revision of Taxes) that there are great inequalities in the present assessment, that present methods of assessment are obsolete, that dwelling property is assessed approximately its full value, that business property is assessed at varying percentages of its true value, and that altogether it would be wise to secure an equitable assessment of the property in the city of Philadelphia before taking up the question of the increase or decrease of the rate of taxation. While nobody can predict with absolute surety in advance, it is altogether likely that if the city of Philadelphia were assessed by Somers System methods, and all of its property put upon the tax list for exactly what it is worth as compared with every other piece of property, that the city of Philadelphia would find that it could do the following:

1. The tax rate could be lowered.
2. The income of the city in dollars could be increased.
3. The borrowing power of the city would be increased.

Of course, if the tax rate were to remain as now at \$1.50, the income of the city would be materially increased. The third prediction would come true in any event.

In other words, if all the owners of land and buildings in Philadelphia paid their just share of the taxes, it would be easily possible to lower the amount of taxes that several hundred thousands of taxpayers now pay, increase the income of the city, and increase the borrowing power of the city; or it would be possible to keep the tax bills of several hundred thousands of tax payers right where they are now, and yet increase the income of the city tremendously and increase the borrowing power of the city; or it would be possible to keep the income of the city exactly where it is now, which would materially decrease the taxes paid by several hundred thousands of taxpayers, and at the same time increase the borrowing power of the city. To do any of these things the city of Philadelphia must be equitably and fully assessed; that never can be done under present methods,

and probably not by the present officials. The city of Philadelphia is paying enough to its assessing officials every year to reassess the city anew every year, but it is not getting its money's worth; indeed, the results justify the assertion that all of the present expenditure, except that which is used for clerk hire, is worse than wasted. In no city in the country in the class of Philadelphia are the methods of assessment so obsolete, nor would what is done in Philadelphia be tolerated.

The experience that the city of Philadelphia had with the Somers System in the summer and fall of 1910, and the injunction suit that prevented a collection of the fee for services, have excited no little interest in many parts of the United States, and a brief statement of the whole affair has been thought advisable.

In May, 1910, the Councils of Philadelphia passed a joint resolution appointing a committee to investigate the assessment of real estate in that city. When this committee was appointed the members of the councils had not heard of the Somers System. But as soon as the committee was appointed, the attention of the members was called to the Somers System and the work that was then going forward in Cleveland and Columbus, Ohio, by the use of the System for actual assessment purposes.

It appears that the assessment of Philadelphia had become inadequate at the tax rate of \$1.50 to produce sufficient revenue for the city's operation—at least that was the opinion of the members of Councils. The assessment was also thought by these Councilmen to be inadequate for the proper borrowing power of the city. It was also common report that the assessments of individual properties were not fair, one compared with another. It was also well known in Philadelphia that the assessments upon homes and small properties were in most cases up to the full value of the properties. All of these reasons were given for the investigation.

After the members of the committee had spent more than a month in studying the problem that confronted them and the Somers System as a possible method of solving that problem, they decided to recommend to Councils a contract with the Manufacturers' Appraisal Company to appraise the 20,000 properties in the district between Vine street on the north and South street on the south, and between the two rivers; this territory comprises the heart of the business district of the city. Under this contract the Company was to furnish all of the clerks, field men, experts, offices, telephones, printed matter—in short to perform every part of the work—for a fee of \$1.70 for each building and \$1.70 for each site valued.

While this was not to be an assessment, as the Councils had no authority to make an assessment for tax purposes, it was to be an investigation so that members of the city legislative department might know exactly and in detail just what the trouble was with the assessments in the business part of the city.

The assessment department of the city of Philadelphia is a cumbersome arm of the government, organized just as it was when all the villages that make up Philadelphia were separate from each other; just as it was when Philadelphia was a village itself; just as it is in most of the large cities, especially of the east. The Court of Common Pleas appoints the Board of Revision of Taxes and this Board appoints the sixty odd men who are assessors. Each has a district and each attempts to ascertain and set down the value of the countless properties in his jurisdiction, without any regard, except perhaps crudely from time to time, to the judgment being exercised by any other one of the sixty assessors. There is one method followed in Philadelphia that is a step or two behind any other large city in the country and that is the attempt to assess land and buildings together. While this habit is obsolete and has been abandoned by every other large city, it is not all that is wrong with the methods of assessing in Philadelphia. Over these assessors is a Board of Revision of Taxes. The functions of these reviewers are not all known to the public; those that are known are not particularly flattering to the common sense of the people of a great city. One habit is for the President of this Board to parcel out to each of the sixty odd assessors at

the beginning of the assessment period a lump sum by which they must raise their total assessment in their wards. Could anything be more arbitrary and really ridiculous than such an operation? At any rate the Councils of Philadelphia decided to investigate, and when they got their investigating clothes on, they decided to make it a real investigation, so that when they got through they would be able to be specific in whatever report they might have to make to the people of their city.

The work started in August of 1910. It was not long before the taxpayers, property owners, property users, real estate men, and all others interested from various reasons began to discuss publicly the value of the streets in the business center of Philadelphia. All possible data, of sales, reasons for sales, and the testimony of all classes were gathered; unit value maps were published in the newspapers; a dozen sets of men were sent out to measure and describe the 20,000 buildings in the territory. It was not long before a tremendous interest in the investigation was excited.

Of course, such a tremendous task had never before been undertaken. The jealous enemies of the Somers System in the New York Tax Reform Association were shooting from their ambushade of self-righteousness. Large property owners began to see that their under-valuations were going to be exposed; land speculators—and no city in America is cursed with a worse breed of this sort of parasites than is Philadelphia—saw that their bubbles were likely to burst. The result was that the speculators and the large property owners combined in a suit to compel the Councils to cease their investigation. And they won their case. They won it on technicalities, as is usual when courts desire to throttle any sort of reform.

This is the technicality that decided the case against the Councils: The members of the Board of Revision of Taxes are appointed by the Court of Common Pleas. The Court of Common Pleas is an arm of the state government. Therefore the assessors appointed by the Board of Revision are an arm of the state government and not of the city government. Therefore, again, the city has no right to investigate any function performed by the state. When this case was decided the people of Philadelphia for the first time knew that they had no control whatsoever over their assessments, and that the most important function of government, the function most vital to the city itself, could only be performed by appointees of the state. This had the effect of making the Board of Revision of Taxes and the sixty odd assessors absolutely independent of the million and half of people whom they were, up to the decision in this case, supposed to serve.

The Supreme Court of Pennsylvania, after two hearings, decided to uphold the Court of Common Pleas, but made no report of their reasons for so deciding.

After expending many thousands of dollars and being allowed to proceed until the work was more than half done, the courts at the best of the speculators and big land interests decided that the Manufacturers' Appraisal Company's contract was null and void. The company, however, made a partial report to the Councils in November, 1910, in which report several very striking examples of crude assessment work were pointed out. For instance, Chest-nut and Eighth streets, was found to be under-assessed, as a whole, by \$284,000; yet in that block out of seventeen properties, six were found to be over-assessed; in other words, the other eleven properties had the advantage of not only the \$284,000 of under-assessment on the whole block, but also the over-assessment of the other six properties as well. The over-assessment of the six properties amounted to about \$47,000. What this meant was that six properties were paying taxes on \$47,000 more than they were worth, while eleven properties were paying taxes on \$284,000 less than they were worth. And this block was typical of what was found in nearly every block of the city that was investigated before the work was stopped.

The following portion of the report made to Councils is descriptive not only of what happened in Philadelphia, but also of the same influences that are stirred up in every city that attempts to correct the tremendous and countless errors in their assessments:

"Those persons who have arrayed themselves in opposition to the purpose of your Committee to effectively investigate the taxable values of real property may be fairly said, by that act, to have taken a position of opposition to the enforcement of the laws requiring fair and proportional valuations of realty for purposes of taxation. Some of this opposition, which has sought out the Somers System, for special attack,

is from designing men who have a selfish purpose to accomplish thereby; but much of it is due to misinformation or ignorance. Those opponents may be partially and generally classified as follows:

"1. A few men engaged in the real estate business, who fear that the practical standardization of real estate values (which would be one result of the installation of the Somers System) would lessen their own prestige as real estate experts. Herefore the valuation of land has apparently been regarded by these gentlemen as a mysterious function, the secrets of which were accessible to themselves and inaccessible to the ordinary person. The Somers System gives consideration to the community opinion, and regards the consensus of opinion as an important factor in the ascertainment of values. The real estate broker is often prejudiced by his personal interests, and in any event he cannot know values; he can at the best ascertain them, just as the layman can ascertain them after investigation.

"2. Real estate speculators, who have made fortunes over night by purchasing at low prices, and who, by artificial 'booms,' have created a speculative market for their property at high prices. Such transactions are injurious in many ways to the best interests of the community, and are only possible because of the lack of an accurate guide to the buyer and seller of true property values.

"3. Unprogressive land owners, many of whom have acquired property by inheritance, and others by purchase at low price, whose holdings have increased rapidly in value through the growth of the community, but who are unwilling to pay back to the community a fair share of that increase, either in taxes or in adequate improvement of their property. These are the most selfish of all the opponents of the Somers System.

"But not all the citizens of Philadelphia are opposed to the work your Committee has begun in employing the Somers System. Those who approve of this effort to equalize assessments are far more numerous, even though not so demonstrative, as the opponents. They include:

"1. The great majority of owners of small homes, whose properties have heretofore been assessed at practically full values (and many of them in excess thereof), while the larger and more productive properties have been and still are assessed at much less than full values. These home owners have, therefore, been carrying a much greater proportion of the tax burden than their fair share. Under the Somers System all property would be taxed, as the law requires, proportionately to its value.

"2. Leading real estate operators, possessing a sense of fairness and sufficient intelligence to appreciate the advantages of establishing standard values for land, based upon the economic worth to the community. These men, engaged in legitimate business, could, through fair assessments, better demonstrate the substantial advantages of real estate as an investment, and are wise enough to see that they could thus safeguard their clients' interests by securing loans upon property commensurate with its true value.

"3. A majority of the influential newspapers of Philadelphia, several of them having endorsed the Somers System editorially. All have given liberal space to the news as it has developed, thus recognizing the great importance of the effort under way to equalize assessments.

"4. The real civic reformers of the city, and especially the officials of the Tax Reform Association of Pennsylvania. These gentlemen have shown a deep interest in all phases of the campaign we have been conducting.

"5. The taxpayers of the Ohio cities of Cleveland and Columbus, where the recent assessments were made by the Somers System rules. These cities are conceded today to be the most equitably assessed cities in the United States. They are the only cities where practical efforts have been put into effect to secure proportional values in making assessments."

ALL ASSESSMENT difficulties are traceable to the lack of analysis of the problems to be solved. While it is not strange that the average assessor should not have an analytical mind, yet it is strange that some of the highly paid officials of the great assessing departments should not develop a little along this line. Mr. Somers is the only assessment expert who has gone about his work from the analytical side of it. He thought it wise to analyze his problem before he attempted to solve it. The result is a system that does work.

SOMERS SYSTEM USABLE IN SMALLER CITIES

Lancaster, Wisconsin, is the smallest city in which the Somers System has been used for assessment purposes. It came about in this way. Lancaster, a town of nearly 3,000 population, is the former home of Walter W. Pollock, President of the Manufacturers' Appraisal Company.

Mr. Pollock spent a portion of his vacation of this year in Lancaster. He found this little city as much exercised about their real estate assessments as are the larger cities of the country. Assessor Richard Willis was about to start on his annual job of assessing, when Mr. Pollock offered to show him and the people of Lancaster how to assess their property in a scientific manner by the use of the Somers System. The offer was accepted, and a meeting of the business men and property owners and users was called at the court house for the forenoon of June 1. About thirty citizens attended, and after the System, so far as the unit of quantity was concerned was explained, a diagram of the central portion of the place was exhibited, and in an hour the relative values of the streets that make up the small business center were tentatively agreed upon.

These business people of Lancaster found, as they do everywhere, that they knew all there is to be known about the differences in the desirability of the various sites of Lancaster. There had been some little recent activity among them in competing for some of the more central sites on account of several business changes. All of this activity gave them a basis for expressing their judgment. Besides, many of the citizens had been up and down and across those streets all their lives, and they found that they really did know why they preferred this site to that one, and what was the measure of the difference.

The method of expressing these differences was new to them, yet they readily changed their habits of expression. They first agreed upon the best inside frontage in the city, and expressed their opinions for all other inside frontages in percentages of the best. This method made it easier for them to disregard lot lines, irregularities of dimensions, and corner effects. They found that when it was made easy for them to express their ideas of value, they gave that expression readily and quickly, and with comparative unanimity. After the percentages had been reduced to dollars, they modified their first judgment a trifle, as was natural when they got the values back into the language they were accustomed to. But there was a wonderful closeness between the first expression and the second.

These values, expressed in dollars, were further considered and talked over. They were published in "The Teller," the newspaper edited since 1883 by the father of Mr. Pollock; in this way all the people of the town had a chance to criticize and express judgment.

The relative values of the various lots that go to make up the six principal blocks of the city were then computed by Somers System experts in the Cleveland office, and the judgment of the people of Lancaster expressed 500 miles away was distributed with mathematical precision in the city of Cleveland. This point illustrates well the fact that the Somers System itself does not appraise. The experts in Cleveland who used the Somers System tables and appliances did not know anything about values in Lancaster, Wisconsin. The knowledge was in Lancaster, and was expressed in Lancaster by those citizens of Lancaster who know all about land values that they themselves have created and are maintaining every day in the year. It was just as easy for the experts in Cleveland to tell how much various sites in Lancaster were worth in money after the judgment had been expressed by those best able to express it, as it would have been for clerks in Cleveland to have told how much 26½ yards of cloth were worth in Lancaster provided some one in Lancaster had judged the value of one yard of cloth.

When it was all over Assessor Willis had the assessment of Lancaster's business section completed on the judgment of the people themselves. The people of Lancaster, being just like the people of every other city, were pleased to have contributed their knowledge and judgment for the benefit of their city; they were also pleased with the idea that they were all treated alike and on the same basis; and they were all pleased with the publicity that attended their real estate assessment for the year 1912.

ASSESSOR H. J. ARNOLD NOW DENVER'S MAYOR

Last December the startling news was telegraphed from Denver that an armed body of men had ousted the Assessor of that city from his office, so that a new Assessor could take his place. This battle took place at midnight in the City Hall, where the old Assessor had barricaded himself awaiting developments.

At the municipal election in May the Assessor who was thus ousted at midnight, was elected Mayor of Denver by over 20,000 plurality. The name of the ousted Assessor and the new Mayor of Denver is Henry J. Arnold.

Mr. Arnold was elected Assessor of Denver in 1911. Being a business man of standing, he was nominated by the then ruling political machine to add prestige to their ticket, and not to be Assessor in the real sense. Mr. Arnold's warning when he accepted his nomination, to the effect that he would be a real Assessor, was looked upon as the usual expression of a notice; so he was elected. As soon as he took office he began at once to carry out his promise, to be a real Assessor. This was a novelty in Denver, besides disturbing to those property owners of various classes who had been escaping their just share of the tax burden.

This is not a story of all that Mr. Arnold did. Suffice it to say he began to assess the banks upon the same basis one with another, the insurance companies in the same way, the public service corporations more nearly on the basis of other property, and so on. Among other things that he did was to install the Somers System methods for the assessment in the business district of Denver. Mr. Arnold was in the East when he heard of the Somers System, and learning that it was being installed in East St. Louis, he called on Assessor McWilliams of that city. He investigated the System and found out just what it would do, and what it would not do.

He returned to Denver and called a meeting of the Real Estate Board of that city, and over 300 members came to his meeting. Mr. Arnold then proceeded to deliver a Somers System lecture, and so well had he grounded himself on the principles of the System while at East St. Louis, that he had no difficulty in making clear his purposes. So earnest was he in his words, that the system took the name in Denver of the Arnold System and to this day it is so called by many people.

Somers System experts were sent to Denver by the Manufacturers' Appraisal Company and the work was begun. The assessment for 1911 had been in progress some time when this work was started, so that Mr. Arnold decided to use the System only in the central district. He picked out the 110 blocks from the Union Station to the Brown Palace hotel, with Sixteenth street in the center. He asked the co-operation of the citizens, and a committee of real estate men and property users was appointed; and Mr. Arnold turned over to them the duty of formulating the first expressions of judgment of land value, subject of course to his final judgment. In this way the highest-priced property in the city was valued, and the values judged by the citizens' committee and approved by Mr. Arnold were distributed by Somers System computations against the owners of the various sizes and shapes that go to make up the 110 blocks in the center of Denver. It was found that some properties were raised in value and some were lowered, but the fact that the whole work was done in public and by the citizens themselves, had a wonderfully strong effect upon all those interested. The net result of finding the real values in the business district, which by comparison with the rest of the city was greatly under-assessed, was to lower the assessment on all the residence sections of the city.

The use of the Somers System was one of the causes for the ousting of the Assessor—and also of his election by so large a majority to be Mayor.

NO PLAN of equalization that is to be carried out after an assessment has ever been found to work. The usual equalization operation is one of favoritism and not of justice.

Springfield, Ill., May 22, 1912.
Somers System properly applied produces results so far ahead of old methods, no comparison; I unhesitatingly recommend it.

BURKE VANCIL,
Tax Assessor.

Springfield, Ill., Assessment is Uniform--- Taxpayers Approve Somers System

At the conclusion of the assessment work in Springfield, Ill., in April, 1911, Assessor Burke Vancil began to receive so many inquiries concerning the Somers System and its use by him, that he prepared a complete statement, which he sent to many inquirers. This statement is so complete in itself, outlines so elaborately Mr. Vancil's predicament as he viewed his work, and gives so intelligent an expression of the value of the Somers System based on his own actual experience, that we give it herewith in full:

In reply to inquiries as to whether our increase in valuation was because of, or in spite of the Somers System, I will say in my opinion the System has nothing whatever to do with the increasing or decreasing of valuations. The result of its use, however, in most instances, is to produce a greater aggregate valuation than under previous methods. This is due to the fact that the Somers System levels up the valuations that have heretofore been grossly under-assessed.

I find here in our own city very many instances of overvaluation, and a great many undervaluations; the undervaluations exist principally in the congested business section of the city. It is my opinion that there will be enough additional property put on the tax books on account of bringing up to where they belong the undervaluations, to very materially reduce the tax rate, and, consequently, the taxes.

It was not my purpose to materially increase assessments throughout the city. There was, however, a substantial increase in the total assessed value of real estate, but this increase was obtained from property owners who had heretofore for some years past gotten off with very little assessment. I find many instances in the business section where property had been given in at as low as thirty or forty per cent of its actual value. Under the Illinois law we take one-third of the full value, which we call the assessed value, and on this basis our rate is computed. There has been an unwritten law prevailing throughout the state, to take the full value for assessment purposes at about seventy to eighty per cent of its real actual value. If I had followed this practice it would have resulted in raising the property values in the business section of the city from a thirty to forty per cent basis to a seventy or eighty per cent basis. I find, however, that there is little criticism or complaint from the large property owners, most of them taking the position that if the other fellow is assessed the same way he is, that he is satisfied.

One of the chief merits of the Somers System is that it produces uniformity all over the city. Another great advantage of the System is the publicity attending its use. The public is kept advised from time to time of all that is being done. One feature of the System which appeals most strongly to the taxpayers, is the opportunity to take part in fixing the values on their own property.

I had an Advisory Board of twenty-five members, composed of leading real estate and professional men who have resided in the city for some years, and who are familiar with every portion of it, and who have watched it grow and are familiar with its values. These gentlemen met with me frequently to discuss values, and to put tentative units on the property in a district. Plats of the district were then published in the newspapers and printed for distribution among the property owners, and thereafter public meetings held for the purpose of having a general discussion as to the relative values as placed on the property by the Advisory Board. I listened to the discussions and noted the opinions expressed by property owners, and where the opinions of the public justified, I raised or lowered units in accordance with the judgment expressed at these meetings. By this process, I undertook to get the real actual full value based on the land exclusive of improvements. At the same time, under the System, a description of every building and improvement was obtained, and the present reproductive cost of the same computed on the basis of the price per square foot of floor space. These values were added to the land values. Thereafter, I made a uni-

form reduction to compensate for possible errors of judgment of the community, and from this basis I will get the assessed value.

Bear in mind that the Somers System is simply a systematic process of arriving at the actual value of lands. It does not increase values, and only increases assessments where former assessments have been very much lower than they should be. Even in Illinois, where we are accustomed to make a reduction of twenty to thirty per cent, the Somers System enables us to do this much more equitably and uniformly than under previous methods. There is nothing complicated about it, and nothing new; it simply teaches us to use the information that we already possess in an orderly and systematic way. The more I become familiar with the System, the more I am convinced that it is the only fair and equitable method of arriving at the value of real estate for assessing purposes.

As to corner lots, I will say that they are figured in accordance with Mr. Somers Corner Tables, using one table for business property, another for residence. The residence tables emphasize the corners less than one-half the business emphasis. In every instance where we figured out lot values under this System, the results invariably coincided with actual sales and transactions, so I am prompted to say that the practical results are quite satisfactory.

I had little opposition. All that developed was based upon the uncertainty prevailing in the minds of the community as to just how it would affect taxes in the future. I had the support of eighty per cent of the community in the work I did under this System.

BURKE VANCIL, Assessor.

The results of the assessment as made by Assessor Vancil with the aid of the Somers System may be of interest. The following figures compare the total valuations for land and buildings with the figures of 1910, the year before Mr. Vancil's work:

	1910.	1911.
Land values	\$15,032,640	\$25,789,765
Improvements	19,601,208	16,708,279

Totals

\$34,633,848

\$42,498,044

There are two significant results shown by these figures: First, the land values are found in 1911 to be greatly in excess of the land figures for 1910; second, the building figures are very much less. After ascertaining the true and proportional values of all parcels of land and the buildings thereon, Mr. Vancil decided that it would be too violent a change from old methods to assess at 100 per cent values. So he fixed the land assessments at 75 per cent of full values as ascertained, and the buildings at 50 per cent. Notwithstanding the cutting off of one-quarter of the land values in each instance, the total of the land values was increased more than \$10,000,000 over the previous year. The reduction of about \$3,000,000 in the assessment of buildings was doubtless due to the liberality of the depreciation assigned to this class of property.

It might be thought at first that the Somers System is the cause of the actual increase and decrease; that is, that the Somers System increases land valuations and decreases building valuations. This is not true, strictly speaking; it is only true in that by the Somers System methods the actual values are ascertained, just as a Howe scale will find all the weight there is in a load of hay, but it cannot be said to increase the value of the load by finding it all as compared with that which a man thought he found when he guessed that the load was about half or two-thirds of what it really was.

The figures for 1910 were the result of inexact methods, of no detailed inventory of building quantities or conditions, of no systematic method of comparing and ascertaining land values.

The tendency under this method of appraisal—which is universally used by assessors and has been for many generations—is to guess too high on building values and too low on land. This comes largely from the fact that land value cannot be seen nor physically measured; buildings can be seen but their actual condition as to remaining in life is often covered up with paint and shroubery; then too the science of depreciation of physical property is so little understood by assessors—which is not strange as it is a task involving special knowledge and training and ought to be applied by experts—that not one in a hundred knows very much about it.

One building in Springfield was assessed in 1910 at \$10,000, whereas an examination of it in detail showed that its worth in 1911 was really only \$4,099; and another on the same block which was thought the year before to be worth \$10,500, was found to be worth only \$4,767; a building in another block was set down in 1911 as worth \$11,000, while an examination in detail showed that it was worth \$12,367. These buildings did not actually change in value in one year by the amounts shown by these figures—indeed the building that showed an increase in value was really worth a little less in 1911 than in 1910; all these figures show is that it was impossible to guess in 1910 and that guessing was abandoned in 1911 and that the Somers System methods simply provided a way to ascertain just what the values were.

The city of Springfield was divided into twenty-eight divisions of convenient size, and in each one of these several public meetings were held where the property owners could discuss with each other and in the presence of each other, their opinions of value of their land. Mr. Vancil in a newspaper article published at the conclusion of the assessment work of 1911 wrote as follows concerning this interesting and valuable phase of the work under Somers System methods:

"Maps, showing the tentative units fixed by the advisory board, were published in the daily papers for the information of the property owners. Similar plats were also printed for distribution at the public meetings called for the purpose of discussing these values. Prior to these public meetings, the assessor personally inspected every block in the district and by the time the work was finished he had traveled over every street in the city.

"Property owners, who attended these public meetings, were very fair and rendered valuable assistance to the assessor. In but one or two instances was there any attempt to misrepresent the value of the property. Whenever anyone attempted to be unfair his neighbors usually interfered. Every one was afforded an opportunity to be heard and the result was that the final units used in computing the values of the property were the units agreed upon by the property owners themselves. Under this plan it is almost impossible for the assessor to use any other figures. In but a single instance has he found it necessary to fix a value contrary to the expressed opinions of the property owners. On the other hand he found it advisable in very many instances to use smaller units than those decided upon by the owners of the property. The assessor has also found it necessary, in certain instances, to guard against the inflation of values by owners who were offering their property for sale or contemplated putting it on the market.

"There was a remarkable unanimity of opinion at these meetings of the property owners due entirely to the opportunity to exchange ideas on the subject. This unanimity of opinion could be obtained in no other way. In order to demonstrate the fallacy of arriving at values by getting independent opinions from individuals here and there, the assessor, in the early part of his work, wrote identical letters to thirty-two leading citizens and property owners asking them to name in the order of their values, the best six business corners in Springfield. The replies from sixteen of these gentlemen indicated a first choice for eleven different corners. Three of them who seemed to agree as to the best corner expressed their opinions as to the value per front foot of the property. A well known member of the bar of Springfield fixed the value at \$1,200 per foot; a prominent banker placed the value at \$2,200. A well known business man said it was worth \$4,000 per foot. Yet these gentlemen could easily agree if they were permitted to discuss the matter between themselves and with other property owners in the community.

"It is upon the information obtained at these public meetings that the assessor bases his judgment as to values. In arriving at his final judgment, the assessor tries to be conservative and has endeavored to put all values lower rather than higher than the true values.

"Assessments under the old plan were always secret. There was never an opportunity for the taxpayer to know how his property was to be valued or to have a part in determining the value. Under the present plan there is the fullest publicity and nothing is done in secret. On account of the great number of buildings it is not possible to give the same publicity in fixing values or to discuss each building value at public meetings in the same manner as land values are treated. While we may not have the same publicity we do have the same uniformity.

"The Public" Reviews Somers System Work in Eight American Cities

A review of the assessment work by the Somers System methods was written by E. W. Dory at the request of the Editor of "The Public" of Chicago, and appeared in that magazine in the issue of April 12, 1912. In connection with this review the following information was contained in a footnote:

"This article, written at the request of The Public, the Somers System was first used in St. Paul by its inventor, W. A. Somers, some twenty years ago, and was first introduced in Cleveland by Mayor Tom L. Johnson about ten years ago. Mayor Johnson afterwards induced the Appraisal Company to establish its present tax department. The value of the Somers System has been demonstrated in other places than those in which it has been adopted; notably in Philadelphia, where its value is generally acknowledged after an extensive demonstration. Its adoption there by the city authorities was prevented by local land monopolists whose tax-dodging it exposed. The growing tendency toward land value taxation gives to experiments with the Somers System special and timely interest."

The article itself is as follows, and gives a brief history of the Somers System work up to the time of the beginning of the 1912 assessment in Beaumont, Texas:

"With the completion of the assessment of realty in the city of Houston, Texas, under the auspices of Tax Commissioner Pastoria and Assessor Welsh, and by means of the Somers system, seven cities of the United States have been assessed wholly or in part by Somers system methods.

"Along with the agitation and discussion on taxation in every part of the country, there has gone an examination of methods of assessment under present laws. Citizens have begun to see that while they may or may not think it wise to change any of the larger fiscal policies, the time for better methods of assessment of realty for taxation purposes is at hand—especially as no new laws are necessary for the purpose. "Equality of assessment interferes not at all with the man who desires changes of an economic nature in the tax laws, nor does it interfere with the notions of the man who desires to retain present methods of taxation, no matter what those methods may be. All citizens realize that whatever the subjects of taxation, land values must bear their share, whether that share be all or only a part of the tax burden. They also realize that the owners of land should carry that proportion of the taxes which the value of their holdings bears to the value of all holdings. In other words, equity and justice are to be desired, so far at least as the relations of individual owners to one another are concerned.

"The Somers System being primarily a computation system, by which the value of the whole may be assigned among the owners, to each in proportion to the value of the whole or of any part of the whole, appeals to citizens wherever studied; and those who live in cities where the Somers System has been installed, have for the most part come to see the justice of its principles and the effectiveness of its methods. It is a remarkable fact that even those who have been in the habit of escaping their just share of the tax burden of a community because inadequate assessment methods have made escape possible, are as a rule complacent in the face of what is to them an increase in the number of dollars that they have to pay into the public treasury after they have witnessed and taken part in an assessment of all the realty of their community under Somers System methods. In every city where the Somers System has been used, many of the so-called "big" owners who have opposed the introduction of this system at the start, have publicly changed their minds after the assessment work was over with—and almost always on the ground that every tax-payer is treated alike. Even these men, who have been allowed to get into the habit of escaping tax burdens because they can, or because they think they have to in self-defense, are really willing to pay their share without protest when they have public evidence, as they have where the Somers System is used, that they are really paying their share and only their share. This fact is one of the collateral benefits of a just assessment, for it is a benefit to any community to have its taxes so laid that its citizens willingly bear their share of the public burden. So far as known, no other

assessment method yet used has ever produced any such widespread satisfaction as the Somers System.

"But perhaps the greatest gain to a community that uses the Somers System, is that which comes from the taking part by individual property owners in the work of assessing the realty of their community. It is surprising how much help the people of a city, great or small, can give in the assessment of their city if the chance is afforded. The Somers System methods make it possible for all the people of a community to take part in the assessment and help the assessor to come to a fair conclusion of value.

"This is possible because the Somers System is the only method by which neighbors can easily exchange opinions on the value of their property. Whenever it is really easy to perform a task, it is much more likely to be done. Therefore, when the Somers System makes it easy to exchange opinions on value for the benefit of the assessor, the community always responds. The effect of this public work upon the public itself is wonderfully beneficial to all who make up that public. This has been noticed in every city where the Somers System has been adopted or exhibited.

"Cleveland, Ohio, was assessed two years ago under the supervision of Mr. Somers himself. Cleveland has a population of 569,000. While there was not time to ascertain the community opinion in every part of the city to the extent that would have been beneficial in the highest degree, yet enough was accomplished along this line to produce general confidence in the assessment and equity in the tax burdens. Property is bought and sold in the city of Cleveland, and loans are negotiated at the banks, on the basis of the assessments. Values have been standardized to a degree never before dreamed possible.

"These observations apply also to the Columbus, Ohio, assessment, except that there was perhaps a greater degree of care in determining values there than in Cleveland; this being true because the assessors in Columbus, which is only a third as large as Cleveland, were able to obtain three months' longer time for the completion of their work.

"The city of Springfield, Ill., was most carefully assessed last year by Assessor Burke Vancell, using Somers System methods. Mr. Vancell spared no pains to get at community opinion of land value. Springfield has about 52,000 people, so that the task for the Assessor was not as great as in the Ohio cities named. Springfield was divided up into 35 sections. The people living and owning property in every section responded to the invitation of Mr. Vancell to come to public meetings and exchange their opinions on the value of their own property. They appeared to like to do it; they liked to talk about something that they knew something about, and they liked to take part in the public function of assessing property for their city.

"The city of East St. Louis, Ill., had doubled in size in ten years. Its population is about 60,000. Assessor NewWilliams installed the Somers System and 45 citizens of that city, real estate owners and dealers, retail merchants, doctors and lawyers, passed judgment on the land values of that city in public meetings. Any citizen who desired could attend and tell what he thought about values. These 45 citizens may be said to represent fairly the public opinion of East St. Louis on almost any public question, especially when they are called upon to work in the open as they were under the Somers System. Since the work has been completed, leading business men of that city who took part in this public work have publicly expressed themselves to the effect that the Somers System has done more for their city than anything that has been installed there. It did this only because it made it possible for the citizens to do for themselves a task that had before been impossible for them to do.

"The Somers System was installed in the business districts of Joliet, Ill., and Denver, Col., and with the same effect except in a more limited way, necessarily, than in the other cities.

"Houston, Texas, has just completed its assessment of the whole city under Somers System methods. Every newspaper in the city is loud in its praises of the effect of the work there. It is too early to get a perspective of the effect as in other places, but Tax Commissioner Pastoria observes in a newspaper interview that

the thoroughness of Somers System methods has disclosed enough property that had escaped any taxation at all, to pay with the tax upon it in one year the entire expense of installing the system. The work there was similar to that in other cities, and real estate men, real estate owners, Chamber of Commerce members, ordinary citizens, all improved the opportunity to take part in the assessment work. The good result in Houston has been so evident that the news of it has spread to other Texas cities, many of which are now considering the installation of the Somers System for their next assessment.

"Investigation of the Somers System methods is active also in the East. Mayor Fitzgerald of Boston has called for an investigation of its merits, and this will soon be had. The City-Wide Congress of Baltimore, an organization made up of representatives of 100 or more civic societies of that city, has investigated the system and endorsed its installation there.

"The Iowa cities, many of them, have begun to study the system with the idea of using it for next year's assessment work. Many cities on the Pacific coast have inquired about and are studying the system at long range. And so it goes. The effect in each city that installs it, encourages its introduction in other cities.

"Publicity of assessment work and accuracy in distribution of values thus obtained, will win in the end; the Somers System is the only method yet devised that provides for these two essentials, and this fact is the secret of its success wherever tried."

Since the foregoing was published, engagements have been entered into for the installation of the System in Beaumont, Texas, and Augusta, Georgia, and at this writing the work is progressing there, with great interest on the part of the property-owners. In Beaumont, as described elsewhere in this number, certain wealthy property owners failed in their injunction suit to prevent the equalization of assessments. In Beaumont, as in Houston, a large amount of land was found not to have been heretofore assessed; and the back taxes collected have gone far towards payment of the cost of installing the System.

In Augusta Assessor E. B. Hook, a former newspaper man, has been studying the Somers System for the past year. The newspapers discuss the work now under way with a great deal of friendliness.

NO METHOD of valuation has been used for assessment purposes in as many cities as has the Somers System.

THE SOMERS SYSTEM is just ordinary common sense systematically applied.

—Assessor Burke Vancell, Springfield, Ill.

The Somers System News will tell its readers the fundamental things about really assess-ments.

It will endeavor to clarify the public understanding on the subject of tax assessment of real property.

It will from time to time show why present methods result as they do in inequalities for the tax-payer.

It will prove to the public that there is a remedy for the troubles that exist. And it will tell what that remedy is.

It will suggest that blaming the Assessor for what appears to be wrong in the assessment is not the way to cure the difficulty, and such action is generally found to be "blaming the wrong man."

It will attempt to prove that it is well to divorce mathematical computation from guessing—doing the guessing by itself and the mathematical problem by mathematics.

It will strive to educate Assessors in the principles of their task so that they will be more efficient public servants.

It will occasionally "show up" the false assessment prophets who are going up and down the country confusing whom they can.

It will, as it goes along, do what is possible for the general education not only of Assessors, but of property owners and property users as to the underlying principles affecting what is usually known as value.

And last, but not least, it will explain the utility of the Somers Unit System of Realty Valuation as the only solution up to this time for the thousand and one problems that are involved in every tax assessment of land and buildings in any city, no matter how large or how small.

THE SOMERS SYSTEM NEWS

of which this is the first number, will be published at least four times a year. Its primary purpose is to advocate the application of scientific principles in the valuation of Real Property for the purposes of taxation. The Somers Unit System of Realty Valuation has proven its worth through its use in the cities of Cleveland and Columbus, O.; Springfield, Joliet and East St. Louis, Ill.; Denver, Col.; Houston and Beaumont, Tex.; and Augusta, Ga. The Somers System principles can be so applied as to bring about universal equity in tax assessments of real estate. . . .



The Manufacturers' Appraisal Co. is prepared to accept engagements to assist taxation officials everywhere in the equalization of their assessments, by the use of the Somers System.



The Somers System News will be sent free to inquirers, single copies or in quantities. To insure regular delivery, send 25 cents for annual subscription.

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