civil service in this country in a most drastic way. There is no reason why government service with us should not bring honor and position just as it does in foreign countries. The government as employer cannot and probably should not compete with business institutions on the score of salaries, but by means of the distinction and standing in the community that it may attach to public office, it can easily and effectively outbid its competitors as may be proved by referring to foreign practice.

Through the Welfare Division and the welfare councils, Mr. Hays has taken a positive step in the direction of rehabilitating the civil service and

making the government a good employer to work for. In this procedure he is also showing the feasibility of running one large department of our democratic government in a democratic way. If it is possible to achieve so large a measure of success in the laboratory of the Post Office Department in spite of its many handicaps, such as size, separation of working units, large number of intermediaries, and the like, it may be that other of our public administrators will be encouraged to try out within the limits of their own jurisdiction the basic features of this significant experiment in employment control.

ZONING CHICAGO

BY E. H. BENNETT

Director of Zoning Work for the City of Chicago

The vast task of zoning Chicago to define business, manufacturing and residential districts, to regulate heights of buildings, etc., is well under way and this is an account of the process as Mr. Bennett described it at the American Civic Association's recent convention.

I

THE assessed valuation of property in Chicago in 1920 was over \$1,576,000,000, not including railroad properties or parks, making the real estate and improvement values approximately three billion dollars. All of this real estate and improvements are affected by the zoning ordinance now in preparation.

Approximately one billion dollars has been spent in building development in the last ten years in Chicago on industry, business, and housing construction. It is probable that equipment expenses will amount to 25 per cent additional on an average. The total expenditure in thirty years, in-

cluding the past ten years, is estimated at \$5,250,000,000.

The sum total of saving that can be achieved by reason of regulated growth and resultant preservation of values, and creation of new values, etc., in this period,—or in one generation,—it is safe to estimate at not less than one-fifth of this sum, or \$1,000,000,000!

II

Zoning in America, however, is to be done not only for the next twenty years but for cities which will no doubt last for centuries. It is important that it be done thoroughly, and for this reason it must be based on a most complete survey of present conditions.

Before we can zone Chicago, we must take stock of what we possess. It is necessary to know in the most minute detail what are the existing conditions of building development throughout the entire *city* area, and to some extent in the territory *lying beyond* the city limits. When this information is obtained, we next have to determine what kind of development will be best suited to the prosperity of Chicago, and then we must put in operation the ordinance necessary to carry this out.

The work of survey is going forward and parties of surveyors are in the field every day surveying conditions and checking up on maps the records of development which already exist. The work is organized to take in outlying districts first, insofar as is possible, due to the fact that winter has begun and conditions for surveying in the outlying districts will be less favorable as time goes on; and the survey will march progressively from the outskirts to the center of the city, finally enveloping and recording the situation in the intensely developed loop district.

At the same time that the field work was begun, a drafting force was organized and is at work on checking, correcting and redrafting, where necessary, the maps, and recording the information gathered in the field. This is a large job and requires a greater number of men than the actual survey in the field. By this work the bases will be created for all of the various special studies which must be made in connection with the zoning work. The total staff is now thirty-two men.

III

The field survey, as is usual, will record all uses to which the present buildings are put, separated into classifications and types, about sixty in number.

The industrial class will cover indus-

tries which by their nature are nuisances or objectionable from the point of view of health or comfort of the public; or those which are unobjectionable but which nevertheless belong in the manufacturing class; and an intermediate class in which some manufacturing is carried on and in which wholesale, storage, mail order business, repacking, etc., are included.

The commercial class will include every building of a commercial nature, such as an office building, bank, general business, and retail stores; and the residence class will be differentiated into single houses, two flat buildings, apartment hotels, boarding and lodging houses and clubs.

Classification of these buildings is one of the most important features of the work. Classification, simple in the main under the general terms of Industry, Commercial and Residence, leads, nevertheless, to the most interesting considerations in the fixing of the categories for the actual zoning areas, and *special cases* are numerous. Certain uses,—for instance, public garages,—offer real difficulties. Public necessities, they are to some extent public nuisances. They are a part of a city's transportation facilities and therefore must be broadcast throughout it. The minor manufacturing concerns or retail establishments having small numbers of industrials, clearly must be provided for throughout the city wherever commercial business exists. The classification, therefore, for zoning will pay strict attention to the organized life of the city and its economic necessities.

The Sanborn Insurance Atlases are used in the survey. The field survey includes the following data in addition to that covered by these atlases: the separation of one- from two-family house, and multiple occupancy of houses and flats; state of depreciation of all buildings; check as to uses of

industry; (frequently stores are now used for industry and dwellings for stores) correction of errors; character of neighborhoods as to maintenance; and vacant buildings.

The most vital feature of the entire work is the determination of the Use Districts. The first purpose of zoning is to promote the prosperity and welfare of the city, and with this in view it is necessary to create conditions favorable to industrial enterprise, to the facilitation of business, and to the improvement of living conditions, which in a broad general sense may be said to result from the proper ordering of the industrial and commercial districts. A thorough study of existing conditions, therefore, is necessary in order that the provisions for the future may rest on a sound basis and be consistent with the best development of the city as a whole.

The survey will include not only a record of the uses to which properties are put but will also record the height and percentage of the lot occupied by buildings and the setback.

The survey and routine work is under way,—some 30 per cent of the area is done.¹ The work of outlining the classifications for the record as to the use districts is made. It will be followed by that of height and area districts, all studied and worked out with reference to the findings of the field survey.

In progressive stages, maps will be prepared of various important studies which will have a bearing on the final determination of the zoning plans. These studies include:

(a) The width of streets (Chicago Plan;

(b) Streets open and streets paved;

(c) Street grades where they affect the zoning problem, including all types of railroad crossings;

¹The survey work is now 78% done and the recording 65% complete.

(d) Time zones of transportation lines, indicating the number of minutes required to go from one point to another in the city, but with special reference to access to the central business district;

(e) Land values where they would affect zoning;

(f) Restricted areas in the new districts having similar restrictions under the zoning ordinance;

(g) The width and depth of lots in residence districts and the setback from the street;

(h) Population densities;

(i) The effect of the zoning plans, as laid out, on the distribution of the working population will be considered;

(j) The areas of lands necessary for the conduct of business and industry in their proportionate relation to residence and expansion;

(k) And also the very important study of the effect of railroad right of ways and yards and waterways on the zoning plan. The chief angle of interest in this consideration is that of recent congressional legislation governing the grouping of railroads.

IV

Following the preparation of the surveys and the work on various special subjects outlined above, a tentative zoning map will be prepared in sections, and conferences held with groups and representatives of associations. This map will be discussed thoroughly during its preparation by the whole commission and then printed, and at the same time a tentative draft of an ordinance will also be prepared and discussed by the commission. This map and ordinance will then be used at a public hearing to be held as provided for in the house bill covering zoning and the ordinance then submitted to the council.