

Limiting Skyscrapers

BY ARTHUR DEWING

The second of a series of three articles dealing with the public's architectural rights, discusses congestion and height of buildings

NO THOUGHTFUL student of the times can logically oppose the skyscraper. It is as integral and can be as useful a part of American civilization as the telephone. Indeed, not without an element of truth, it might be claimed more useful. For while the telephone brings all the business world (on which America today depends) into close communication, the skyscraper, concentrating the business populations over comparatively small areas, facilitates industry by providing opportunities for personal contacts that would not otherwise be possible; and no matter how television is perfected, important business is not likely to be settled elsewhere than in conferences. Moreover, while some people still prefer to live in private houses, the majority of American city dwellers today manifestly choose rather to command the services which skyscraper apartment buildings furnish to their occupants in common. Unquestionably American cities need new skyscrapers. America has yet to realize, however, that the skyscraper requires a new kind of city.

It is, in fact, impossible to discuss the skyscraper, with its thousands of inhabitants, its prominence, and its obstruction of light and air, without discussing its relation to the city. Why, then, should skyscrapers often be built with scant or no consideration of it? Why should any skyscraper be erected without a detailed study of the relation it will bear (1) to the city as a whole; (2) to the district of which it will be a part; and (3) to the square on which it will stand?

NOTWITHSTANDING the prevalent opinion that skyscrapers as individual buildings have probable lives of only some twenty to thirty years, conceivably skyscrapers now under construction may stand a century or more. Prosperity, the last year has made quite plain, is not with us always. Possibly America's present period of building may reach its peak before the next half century has elapsed. Whether it does or not, the essential waste and exploitation in creating anything as expensive as a skyscraper without planning it for permanence are irrefragable. Struc-

turally, skyscrapers are so built. Socially they are not.

Properly planned for the future, the relation of the building to the growing city is of first importance; for though its interior can be made over, its structural form can not be altered radically. From the standpoint of traffic — avenues, cross streets, pedestrians, motors — how can the proposed building best be designed to help alleviate the present congestion, not increase it?

FROM that of the district, considering existing and possible future buildings, how can planning be designed to give the district the maximum of air, light and free movement? What height and size are best suited to the district's present and probable future needs? From the viewpoint of the square on which it is to stand, how can it best be designed to provide the maximum of convenience in relation to existing buildings? Should its erection be delayed until a larger lot area for its base becomes available (not only until the available area makes it a sound investment)? Until the whole square can be secured? Satisfactory solutions of these problems are vital to the proper growth of the city. Yet today they seem to govern the erection of few buildings. A salient case in point is the talk of incorporating garages in the type of skyscraper we now have. Such a garage might serve, it has been estimated, perhaps one-thirtieth of the occupants, or say 1,000 persons in one of the largest buildings. Imagine an unbroken stream of even 500 automobiles — at the rush hours twice a day — added to the traffic of the

present city streets at any place in any congested area!

If America's building activity is to be turned to America's advantage, that is, to the benefit of whole urban populations, not simply to augmenting the prestige and wealth of a relatively small group — the builders — then the development of any given building must be made strictly contingent on the best interests of the city. Building laws controlling sanitation, fire exits, and to some extent zoning, already exist in important American and foreign cities. Architecture has evolved from them: the now familiar set-back type of skyscraper is the direct product of New York's zoning regulations. To go one step further and empower architectural planning boards for cities is by no means a utopian dream, though at first it would unquestionably be difficult to make them function satisfactorily. Certainly they should be divorced from politics: their members obviously should not be political appointees.

IT MIGHT not be impracticable for local chapters of the American Institute of Architects and local real estate organizations jointly to appoint committees that, each in its own city, would recommend progressive legislation by which *laissez faire* building would be abolished. Nor is it impossible that such committees might locally be endowed (as they would have to be) to carry necessary ordinances through the politicians and make them effective after being passed. Unless something of the sort is done, the common citizen will suffer increasingly with the entry

of each new competitor in the race for height.

Such procedure would be said to invade the rights of individuals, for ownership of a piece of land would then no longer give a man the right to erect on it virtually any kind of building that he chose. The freedom of the individual can never be too carefully guarded. One must not forget, however, that, as the wise King of Brobdingnag maintained, "a man may be allowed to keep poisons in his closet, but not to vend them about *for cordials*." (The italics are mine.) People today are living together by the millions, and if anything except chaos is to result they must work and build together for the common good. In such a society an individual, who abuses his rights by imposing on his neighbors, sacrifices that part of his freedom which he abuses. That is to say, a man should be able to hold and to talk and write about any opinion he pleases; but also, in society as it exists, he is free to make others live according to his personal concepts of what should be only in so far as those concepts are not detrimental to his neighbors. Probably we would all prefer to think of society as giving the individual complete freedom of action as well as thought; but it is doubtful if any society ever has, certainly our own does not, and it is unlikely that any will during the lifetime of the readers of this article.

IN QUESTIONS architectural the only even approximately adequate judge of what is needed and what is detrimental would seem to be some such non-political body as has been suggested. For any one man, or par-

tisan group, to dictate the form of a skyscraper, which houses thousands of people and directly affects millions more, is absurd. When the public, as we have seen, pays in rent and investment for building space, it has the right to the best that human ingenuity can contrive.

A BUILDER of a skyscraper should, at the very least, be required first to accumulate a lot area that bears a direct and thoughtfully determined relation to the height of his proposed building. In New York today, above a specified point whose location depends on the width of the street faced, a tower of unlimited height may rise on an area not exceeding one-fourth of the base area of the building itself (that is, the lot on which the building stands), with the additional restriction that the face of the tower can not come within forty-five feet of the building line on a cross street sixty feet wide, or twenty-five feet of that on an avenue one hundred feet wide. Clearly, a certain base area is necessary before one-fourth of it is an economically practicable area for a floor in a tower so restricted. Nevertheless, in the city today more than one tower, unlimited in height except as stated, may and does rise from the same square, thus obstructing light and air which, if but one enormous tower, or several smaller with setbacks proportionately nearer to the streets, rose from that square, might reach its streets in larger and more pleasing shafts. To this lay observer it would seem that towers of unlimited height might well be permitted only on buildings whose bases occupy squares, and that the heights

of all others might advantageously be limited in direct proportion to the areas of their bases — limited by the city's need for light, air and vistas, as related to a reasonable economic return promised.

THE question deserves attention, for nobody can say to what height skyscrapers may ultimately reach. W. C. Clark, of S. W. Straus and Co., and J. L. Kingston, of Sloan and Robertson, Architects, after a comprehensive survey, determined that, under existing conditions in New York, and with a typical midtown Manhattan block as the base area, an average diminishing return on the total amount of the investment would result after a height of some sixty-three ("the point of maximum economic return") to seventy-five stories was reached. Harvey Wiley Corbett, in an article in *The New York Times*, has expressed the belief that "structurally speaking one hundred stories is the maximum height to which any building erected on one of our present city squares could possibly rise, and that eighty stories is much nearer the economic point to which they will be carried." This estimate he bases on a detailed consideration of rents and such construction elements as the amount of steel needed at greater heights and improved elevator transportation.

Elevators are of special interest and importance. While the shafts must run the whole height of the building and thus occupy valuable space on every floor, each elevator can serve, if it is to provide the prompt transportation demanded, only a limited number of floors.

Elevator manufacturers now propose, by means of safety devices, to run two distinct cars in one shaft at the same time; the upper, an express to and local above a specified floor, the lower simply a local to the floor immediately below that on which its mate first discharges passengers. Such elevators would make possible, as Mr. Corbett points out, "a building much higher than was originally contemplated under any system of elevator operation now in use."

WITH new heights for skyscrapers in prospect (the prestige attached to "the world's tallest building" makes the competition keen), the American public may well ask: what of our streets? Throughout America millions have been spent on schemes for city planning, yet except for a few double-decked streets, notably in Chicago and New York, America's municipal governments have made no effort to bring the street systems up to date with the buildings. That buildings and urban populations of a magnitude beyond the most prophetic Ancient's wildest dream should be served by streets the Romans might have planned, is about as sensible as it would be to carry on our ocean trade in galleys or to print this magazine by hand. American metropolises, with their business populations settling increasingly in concentrated areas, require streets adapted to the needs of the new architecture and the new city populations, streets as original in concept as the buildings which they serve.

For the best proposals to date we must again turn to the writings of Mr. Corbett. Elevated, arcaded side-

walks, and covered walkways to traffic centres, would seem, he says, the best solution of the traffic problem. Walking is far more convenient and desirable for short distances than motor transportation, if the pedestrian is insured against delay at crossings and protected from bad weather. And by raising sidewalks one story and restricting the streets to vehicles, the vehicular traffic capacity of the present streets would be materially increased. Such sidewalks — certainly if skyscrapers took the square as the unit for their bases — would become an integral part of the new buildings, and with bridges at all crossings would give walking again its logical place in city life and facilitate motor traffic to a degree of which today we have no conception. Then zoning could be truly scientific. Definite and distinct traffic centres, with perhaps parking spaces and garages beneath, would radiate express traffic avenues in turn feeding and fed by cross streets. Skyscrapers within comfortable walking distance would be connected with these centres by covered walkways. Similarly the large buildings not located at subway stations could have covered walkways leading to them, as New York's Grand Central district has, in part, today. Why should not the designs of new skyscrapers at least make possible the incorporation of elevated sidewalks in the buildings without fatal alterations?

SOONER or later, too, a satisfactory relation must be established between aircraft and the city. Because of the great risks involved, it has never seemed probable that air-

planes would be permitted, at least for some years, to land on even the tallest buildings man may erect. And while skyscrapers are more suited to provide, occasionally, mooring masts for dirigibles, this, also, does not seem likely to prevail to any great extent. A convenient relationship between aviation and the city can best be established by facilitating transportation to and from the airports, and by locating airports near the city, not miles away as now. New York, for instance, would benefit far more by having a commercial aviation field on Governor's Island than the United States does by maintaining its old military post in that part of the harbor.

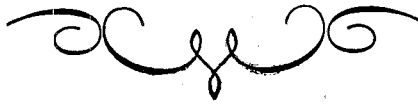
IT MUST always be remembered that, whether or not we personally approve, the movement today in all manifestations of American civilization is decidedly towards specialization of function. The individual is no longer self-sufficient, but depends increasingly on others and the harmony of his relations with others, for almost everything he needs or wants. In architecture this movement is immediately apparent. New York has practically of itself grown with finance and municipal affairs downtown, the clothing trades from Fourteenth Street through the Thirties, real estate centring about Forty-second Street, the better retail shops on Fifth Avenue, and amusements on and in the neighborhood of Broadway from Times Square to Columbus Circle. In a large city convenience makes such centralization of the various interests necessary. So true is this that when a new skyscraper is opened a movement of

the business population is noticeable. And already a tendency to closer concentration is found: to cite New York again, there has been for some time a building where many architectural services maintain offices, and the new Rockefeller entertainment centre promises to house four large theatres and twenty-seven broadcasting studios.

People have grown used to height; they now desire its accompanying fresh air, light, quiet and vistas; today the only prejudices against office space far above the street lie in its cost and, beyond a certain limit, in elevator service which, as we have

seen, is likely to improve. Concentration of specific business interests in specific buildings can be one of the outstanding commercial achievements of the skyscraper.

But the skyscraper can not begin to realize its potentialities until city and skyscraper begin to develop rationally together. That is why the Rockefeller entertainment centre, whose construction involves the demolition of three square blocks in the heart of New York, and whose announced plans promise changes in the streets affected, may prove one of the most significant undertakings in the history of architecture.



Selling South America

BY GARDNER L. HARDING

Which Includes the Effect of Eskimo Pies on the Piano Business

IN THE troubled years that followed the Armistice it became a habit for Americans to abuse each other about our trading habits in Latin America. The argument ranged over the whole field of our foreign trade, for in those days a harvest of some sort was being reaped for the first time in almost every country in the world by a new and unabashed and eternally hopeful generation of American merchants. But it was in Latin America that the errors of that new era were most numerous, most widely circulated and altogether most unsettling to our self-esteem.

For some years, as those who took part in it will vividly remember, our home-coming American trade representatives went on heaping scorn and recrimination on each other. The American public, knowing very little of the reputation of American business abroad except what appeared in print, began to take this harsh self-analysis seriously. We felt ourselves confirmed in the long-standing impression that Americans got most uncomfortably into deep water by trading abroad. It seemed to require a finesse, especially south of the Rio Grande, that

we possessed neither in knowledge of the people and their customs, nor in the technique of overseas commerce in general. We packed with no knowledge of where the goods were going and we shipped with no assurance of our customers' credit standing. We could not discipline our shippers, who sold to honest South American merchants goods below specification and at prices higher than the agreed quotation. We dumped superfluous goods and we turned down orders when we found the home market more profitable.

WE ROWED and wrangled with each other about all these things, and the general public shook its head and inwardly abandoned Latin America to our European competitors, who had behind them generations of delicate operations in just this sort of business and only the brief interruption of the war to recover from before they could resume the ascendancy that accident, but apparently not destiny, had placed in our way.

When this acrimonious American self-scrutiny had been proceeding for five or six years, however, the unassuming gentlemen who keep the