

being crowded together in insufficient quarters. The land increment is wasted in land speculation; it is ultimately added to the cost of houses. A means must be found to preserve this unearned increment for the use of the community.

Even if there were available and cheap enough credit, land, material and labor to build decent homes for all, the housing problem could not be solved without a proper plan. Planning is the function of the architect. Much progress has been made during the last decade in the design of individual houses and groups of dwelling places. But the housing problem of our large cities cannot be solved by more houses. The unrestrained and unguided growth of New York shows the waste that comes from lack of foresight in planning our communities. There is not room for the population to live comfortably, decently or healthfully near their work. Transportation cannot solve the problem. The subways are inhumanly packed. There are not streets enough to care for our traffic. New York has grown without plan to the point where it is choking its own growth. More houses—without a proper plan for their location—can only lead to more congestion and more expensive homes. All effort will be wasted if we further increase the size of our unhealthy and inefficient great cities. We should plan to decentralize our population by developing smaller, self-contained communities in which sufficient space is provided for agriculture, industry and organized social life. These should be small enough so that every family may have a garden and every worker may walk to and from his work, and large enough to allow efficient industrial organization and the social, educational and cultural activities that make city life attractive. They should be surrounded by a belt of land that should be restricted for all time to farming and recreation.

Governmental housing, though necessary as a temporary means of averting a crisis, seems dangerous and unsafe as a permanent policy. Municipalities should be given whatever power, if necessary, including that of building homes, to avert the dangers that are threatened by the present lack of sufficient houses. But the permanent function of the State in regard to housing should be that of education and of guidance of the various agencies that must need co-operate to give us sufficient, adequate homes, properly placed in relation to work, recreation and food supply. For this purpose the State and local housing agencies are badly needed.

As a first step forward in the development of such a housing programme, we recommend the adoption by the State of the recommendations of the Reconstruction Committee:

1. That a law be enacted requiring the appointing of local housing boards in communi-

ties having a population of over 10,000 and the appointment of a central State housing agency for co-ordinating local effort.

2. That a constitutional amendment be enacted permitting extension of State credit on a large scale and at low rates to aid in the construction of moderate priced homes.

3. That an enabling act be passed permitting cities to acquire and hold or let adjoining vacant lands and, if necessary, to carry on housing.

New British Engineering Society

A new engineering society has been formed in Great Britain to encourage the study of the history of engineering and industrial technology. The founders claim that this field has been neglected and that the world does not appreciate how much it owes to the British and other engineers who have done greater service to the world than generals and politicians. Many distinguished British engineers have interested themselves in the formation of this body, which will be known as the Newcomen Society. Members will be sought in the British Colonies and Dominions, and also in other countries.

Physical Characteristics of Birch, Beech and Maple

Birch, beech and maple are very similar in appearance, and have approximately the same weight. Hence it is comparatively easy to mistake one of them for another. A method which anyone can use to distinguish them is suggested by the U.S. Forest Products Laboratory. The method makes use of the relative width of the pores and medullary rays in the three woods.

If the end grain of birch, beech or maple is cut smooth with a sharp knife and examined with a hand lens, the pores will be seen as tiny holes distributed fairly evenly over the surface, and the medullary rays will appear as narrow lines of a different shade running at right angles to the growth rings.

In beech some of the rays are very distinct even without a lens. The large rays are fully twice as wide as the largest pores.

In maple the rays are less distinct, and the largest are about the same width as the largest pores.

In birch the rays are very fine, invisible without a lens. The pores are several times larger than the rays, usually being visible to the unaided eye as minute holes on the end grain and as fine grooves on dressed faces of the board. The pores in birch are considerably larger than the pores in beech or maple.