Welcoming the Birds

Supplying Nesting Boxes and Fresh Water Induces their Return

Birds about the home add a touch of nature that can only be appreciated by those who have succeeded in attracting them. They may be gathered about in all seasons of the year with ease and certainty merely by offering what they desire. In summer they do not require to be fed, but they do appreciate fresh water for bathing and drinking. A shallow pool, of varying depth, if only a foot across, becomes on hot days a centre of attraction. A pan, with stones in it, set in the ground and kept filled with water, will provide this attraction for the birds.

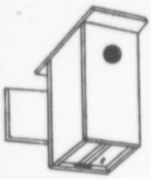

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Fig. 2

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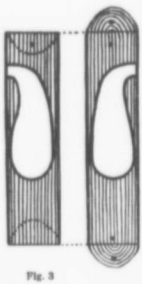

Fig. 3

Birds are desirable not only on account of their beauty and song, but because of their economic worth. They are especially useful as insect destroyers during the breeding period, when they have to work early and late to obtain sufficient food for their nestlings, and their movements at this season are particularly interesting. For this reason it is especially desirable to provide them with nesting facilities. They will make use of bits of wool or twine, or feathers, in making their nests.

Nesting boxes also furnish an inducement for the birds to visit us. Many species of birds now accept the hospitality of these boxes for the safe rearing of their young, and will occupy them year after year.

Simple forms of nesting boxes are shown herewith. Figures 1 and 2 show boxes constructed of boards, while that in figure 3 is made from a log about 6 inches thick, split in half, and gouged out to form a cavity. The two pieces are then screwed together. It is necessary to have either top or bottom removable for cleaning out old nests. The boxes should always be placed with the front protected from prevailing winds, and the opening should be about 1 1-8 inches for the chickadee, 1¼ inches for the swallow or wren, 2 inches for the woodpecker, fly-catcher or flicker, and 3 inches for the screech owl; in each case the opening should be near the top.

Much pleasure may be secured and greater interest in nature study created by such little encouragements to the wild birds.

Children's Playgrounds

In recent years, the playground movement has secured a very strong hold upon the public in most of our cities, and no doubt others will be taking up the work during the coming season. The movement has not, however, reached the height to which it should aspire. While the play feature of the ground has been fairly well provided for, as a rule, the playgrounds are bare of trees, foliage or flowers. Little effort has been made to encourage the children to improve or beautify their grounds, or make their surroundings more attractive.

The children frequenting the playgrounds are usually from homes with little space for either garden or grass. They have no opportunity to cultivate or become interested in plant growth or flowers. The playground should endeavour to furnish what is lacking in this respect at home. Space should be devoted to flowers and plants; beds should be laid out and borders planted by the children under supervision, a short time each day being devoted to it. This would go far toward making the playground more attractive, and would constitute a training which the children would not forget when they reached maturer years and had homes of their own. There is no reason why these grounds should be absolutely bare, and it is hoped that the promoters of this laudable movement will extend the scope of the work to beautifying the areas devoted to play.

Fire Retardants

Experiments being Conducted to Obtain Effective Process

Closely related to preservative treatment against decay is the development of fire retardant materials and processes, particularly for shingles. While only 27 per cent of all fires spread to adjoining buildings, and individual carelessness and character of contents, rather than the building material, are responsible for most fires, it is an additional measure of safety to have fire retardant shingle roofs Dr. Herman von Schrenk, who has for several years been testing all available materials, recently announced that the long search for a satisfactory fire retardant was practically ended. Materials have now been found which effectively protect shingle roofs from sparks and brands, and prevent the spread of a fire on such fire-proofed wood. Almost simultaneously the Forest Service announced the development of a fire-proofing chemical. These materials, in most cases, act to prevent decay as well as fire.—*Sterling.*

Bird Protection

Canadian Organization doing Good Work in the Schools

The Canadian Society for the Protection of Birds, founded about a year and a half ago, is actively engaged in the promotion of bird protection throughout Canada. While national interest is naturally concentrated on patriotic endeavour along other lines, much has been done through lectures, addresses and social meetings to enlist public sympathy on behalf of the society's work. Thousands of copies of a very valuable report, "The Value of Birds to Man," by James Buckland, are being distributed; also posters warning the public of the penalty attached to the destruction of insectivorous and other birds.

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A further important feature of the movement is the manufacture of nesting boxes. Through the efforts of Mr. J. A. Harvey, a well-known Toronto architect, Berlepsch boxes of solid timber, hollowed out, which when imported cost three dollars each, have been made for the society at a cost of fifty-five cents each.

Local branches of the association will be formed in any part of the Dominion, special attention being given to arousing the interest of school children. The accompanying illustration is a reproduction of the official crest taken from the junior pin to be issued by the society to Canadian children at a cost of a few cents.

Metallic Magnesium

Many uses for this Product—Found in Several Provinces

Magnesium is one of the several metals which the present war has proved to be of great value. As with numerous other products, before the war, France, Great Britain and the United States were dependent on Germany for their supplies of this material. The price was steady at about $1.45 per lb. but rose from $2.50 shortly after the beginning of the war, to as high as $7.50 per lb. The price now is about $5.50 per lb.

The chief uses of magnesium are:

Scavenging alloys making denser, cleaner, stronger and more homogeneous alloys.

Illumination, as in military uses for shrapnel trailers, star bombs, flare lights, etc., and in photography for flash lights.

In aluminum castings 2 per cent of magnesium cleans up the aluminum, almost doubling its tensile strength, quadrupling its resistance to shock or jar and reducing the cost of machining by more than 50 per cent. This is of great importance in connection with the construction of aeroplanes and dirigible motors, high-speed engines of every type and in all machinery or structures where strength, with a minimum of weight, is required.

Metallic magnesium is usually recovered by the reduction of the chloride but it can also be obtained from the reduction of the oxide or carbonate. The common magnesium carbonate rock is known as magnesite. Deposits of this material occur in a limited area in the township of Grenville, Quebec. The production in 1915 (including some calcined), amounted to 14,779 tons, valued at $126,535, in striking contrast with a yearly average production from 1908 to 1914 inclusive, of 621¼ tons. While the known deposits are limited in area there is every possibility that the district contains other workable deposits. Float magnesite has been found over a wide area. Magnesite is also found in Yukon and in the Cariboo district, British Columbia.

The highly refractory quality of magnesite and its ability to form a hard vitreous body when combined with magnesium chloride has led to its adoption for a number of purposes. The largest consumption is in the manufacture of magnesite firebrick, crucibles and in bedding steel furnaces. It is mixed with sand, sawdust, ground quartz, talc and other substances in the manufacture of tile, flooring, roofing, artificial marble, wainscoting, etc. Magnesium bisulphide, is used in digesting and whitening wood pulp in paper mills.—W.J.D.