

until it becomes uniformly creamy. One-third gallon of this mixture is diluted with 2 gallons of water, and sprayed thoroughly and with force.

A fourth insect which calls for attention here in the pine leaf-scale (*Chionaspis pinifoliae* Fitch), which sometimes infests the needles of white pine. This insect is a small white comma-shaped body usually found in quantities extending along the needles. Although small, the insects are rather conspicuous, the white scales imparting a grayish cast to the pine foliage. They are hardly to be considered a serious menace to the life of the pines, but may contribute materially to their poor appearance, causing the needles to become faded to yellowish.

Under the whitish scale a soft-bodied sucking insect is found which sucks juices from the needles by means of its long thread-like beak. The insect overwinters in the egg stage, the eggs hatching in the spring, the time of hatching varying with the locality and advance of the season. The young scale-insects crawl about until they find a suitable place, which is usually the new needles, where they settle and insert their beaks and commence to feed and prepare for the development of their protective covering, the scale. There may be two or three generations during a year, depending on the locality and the season.

The pine leaf-scale is often controlled by natural enemies, such as ladybird beetles, although it occasionally becomes sufficiently numerous to affect the vitality of the tree, when artificial control measures should be adopted. Spraying with a kerosene emulsion prepared and diluted as directed for the pine bark-louse will be found effective if resorted to when the young scales or crawlers are appearing. A careful watch of infested trees, using a hand lens on the scales and young needles, will enable one to determine the presence of the young scales or crawlers with greater assurance than will a reliance on their time of appearance above indicated; it can, however, be stated that in the vicinity of Washington, D. C., the first generation usually hatches from the eggs about the middle of May.

Some English Books on Golf Course Construction and Turf Upkeep.

SOME ESSAYS ON GOLF ARCHITECTURE. By Colt and Alison. Charles Scribner's Sons, New York, N. Y.

THE BOOK OF THE LINKS. By Sutton. W. H. Smith & Son, Stamford Street, S. E. 1, London, England.

GOLF ARCHITECTURE. By Mackenzie. Simpkins, Marshall, Hamilton, Kent & Co., 4 Stationers' Hall Court, E. C. 4, London, England.

THE LAYING OUT AND UPKEEP OF GOLF COURSES AND PUTTING GREENS. By Sutton. Simpkins, Marshall, Hamilton, Kent & Co., 4 Stationers' Hall Court, E. C. 4, London England.

LAWNS, LINKS, AND SPORTSFIELDS. By Macdonald. 1923. Charles Scribner's Sons, New York, N. Y.

(It is suggested that the purchasing of these books may be facilitated by ordering them through your local bookstore.)

New Member Clubs of the Green Section.—Champlain Country Club, St. Albans, Vt.; Coronado Country Club, Coronado Beach, Calif.; St. Charles Country Club, Winnipeg, Manitoba; Kokocache Club, Dover, Mass.; Chetremont Country Club, Cherry Tree, Pa.; Centre Hills Country Club, State College, Pa.; Grantwood Golf Club, Cleveland Ohio; Southwood Golf