various phases of turf work. The exhibit will be made up of charts, photographs and actual materials used on courses.

It is planned to have an exhibit of soils stressing the physical difference in various soil types and different handling of these soils for golf course purposes. A demonstration will be made showing the relative rates of absorption of water by various soils and the effect of layers as against thorough mixing of the components.

The exhibit will point out the relationship between topdressing material and weed control, and the effect of sterilized soil upon viable weed seed content.

Various fertilizing materials stressing the comparative concentration of these materials will be shown. A new golf course fertilizer chart giving analyses of various materials and rates of application will be available.

Seed of various species of golf course grasses will be arranged for observation under the microscope.

Specimens and pictures of various insect and fungus pests which are of economic importance in turf work will also be available for examination.

## Greens-Show Theme Will Be "High Standards, Less Cost"

PRACTICALLY three-quarters of the display space available for exhibitors at the Fifth Annual Greenkeepers' show at Columbus, O., February 3 to 6, was under contract on December 16, according to Fred Burkhardt, chairman of the show committee. As the floor plan is such that all space is well located, Burkhardt is of the opinion that this year's event will be a sell-out.

Contracts for show exhibition space call for use of the auditorium at Columbus, O., from 12:01 a. m., February 2 to 10 a. m., February 3 for preparation of the exhibits and from 9 p. m., February 6 to 11:59 p. m., February 7 for their packing and removal. The program of the convention and the display will run from Tuesday, February 3 to Friday, February 6, inclusive.

Despite budget stringencies it is certain that the 1931 annual convention of the National Association of Greenkeepers will see a record attendance of the greenkeepers' having their expenses to the convention paid by their clubs as a matter of course maintenance.

The association is at work on details of the program, tentative features of which, were given in December GOLFDOM. It is planned to make the keynote of the convention "Battling the Budget for Higher Maintenance Standards," with the speakers discussing what to do and the exhibits showing "What to do it with." It is expected that the association will have sold almost \$11,000 worth of exhibit space when the curtain goes up on this year's show.

Exhibitors, as of December 16 list of space contracts:

Worthington Mower Company.
The F. & N. Lawn Mower Company.
Ideal Power Lawn Mower Company.
International Harvester Company of America.

O. M. Scott & Sons Company. Stumpp & Walter, Inc. E. G. Staude Mak-A-Tractor Company. Toro Mfg. Company. Virginia-Carolina Chemical Company. J. Oliver Johnson, Inc. Wendell P. Miller & Associates. Buckner Mfg. Company. Roseman Tractor Mower Co. Peter Henderson & Company. L. R. Nelson Mfg. Company. Standard Mfg. Company. Friend Mfg. Company. J. M. McCullough's Sons Company. Armour Fertilizer Works. C. B. Dolge Company. National Mower Company. Chilton-Crocker Company. Smith Agricultural Chemical Company. Golf Course Supply Company. Pennsylvania Lawn Mower Works. Koppers Products Company. Lawn Equipment Company. George A. Davis, Inc. Economy Irrigation Company. American Cyanamid Company. Nitrate Agencies. Ohio Humus Products Company. Jacobson Mfg. Company. Milwaukee Sewerage Commission. Fate-Root-Heath Company. Universal Sand Equipment Corporation. Atkins & Durbrow, Inc. Campbell Irrigation Company.