Modern Machines
--Cut Costs of

The quick and plainly visible benefits of turf aerification justified the heavy expense of considerable manual labor in the past. But, it was the low cost of the operation made possible by the recent development of speedy, efficient machinery that has moved aerification high up on the list of essential continuing maintenance operations throughout golf and other sports turf fields. Many undesirable conditions can be corrected through aerification and better turf, more economically maintained.

The vast majority of American courses are considerably over 20 years old. Soil compaction, resulting from years of play and equipment traffic, inadequate drainage, etc., has been generally recognized as one of the most common, and perhaps most costly handicaps to natural turf development. When soil is compacted, water and air cannot move through it, plant food...
Broaden Benefits
Aerification

cannot get down to the root zone and the resultant shallow-rooted turf cannot stand up under adverse weather conditions.

The existence of thatched layers and matting at the surface of the soil also prevents efficient entry of elements essential to the turf's healthy growth. Turf is more susceptible to disease when compacted or thatched conditions are permitted to exist.

Uniformly good establishment of grass has been obtained by aerifying several times to prepare a seedbed in existing turf.

Water efficiency and conservation are important benefits of adequate aerification which helps the soil to capture the water without run-off, and hastens its penetration through the usually 2 in. to 3 in. upper compacted layer.

The accompanying illustrations show some of the reasons for, and benefits of, aerification.

mixture of soil in this green has resulted in poor turf. With regular aerification, soil will become mixed and new materials can be added to it. 6—Compact, heavy soil breaks apart. Roots will not penetrate. Regular aerification to loosen soil and help introduce coarser material will bring improvement. 7—Localized dry spots need aerification so water can penetrate well down into soil. 8—Cross-section shows how the cultivation action of the Aerifier loosen the under surface soil with but a small opening left at the surface.

slopes. This experiment involves fertilizing of a putting green on which flat areas receive different fertilizers than the slopes.

Prof. Dickinson mentioned the large enrollment in turf courses. 105 students were enrolled in courses under himself and Mr. Cornish, 25 majoring in the two year turf course; others were students majoring in Landscape, Ornamental Horticulture and Arboriculture, who are taking one course in turf. This figure did not include students to be enrolled in the ten weeks Winter School commencing January 1 which is already oversubscribed.

Prof. G. Cornish reported on results he had obtained in a comprehensive experiment conducted over the last two years on the control of clover in turf. He stated that he had verified quantita-

January, 1950
Members and officials of the New England Turf Assn. gather at Univ. of Mass. for first Field Day. Group shown above inspected turf plots and research work resumed in 1948 at the Univ. under direction of Prof. Lawrence S. Dickinson. Special emphasis has been placed on study of watering problems in 1950 because of unusual drouth conditions experienced in 1949 in most of New England area.