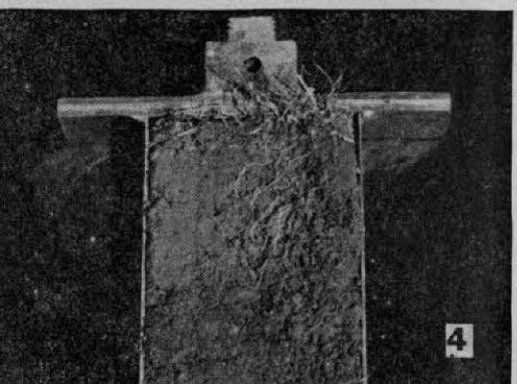
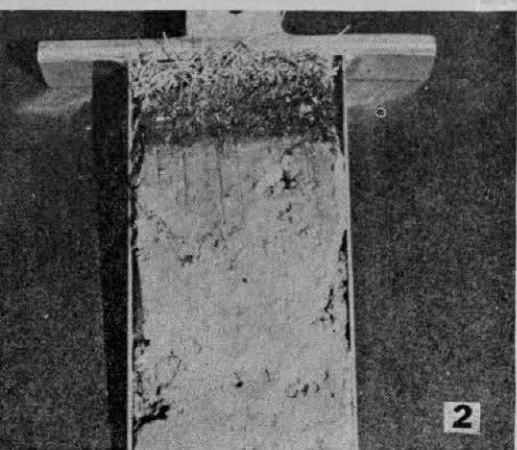


Modern Machines --Cut Costs of



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

1—Turf is going out due to lack of moisture because water runs off compact ground. Aerification to open up soil and admit water would correct this. 2—A layer of undecomposed organic material on the surface prevents penetration of air, water and fertilizer. Aerification breaks through such surface layers so materials can enter soil. 3—Uniformly good root growth on lawn which has been aerified regularly. 4—Deep roots spread out in Aerifier hole due to presence of air, moisture and plant foods beneath the surface. 5—A poor

New England Turf Association Holds First Field Day

The New England Turf Association held its first field day at the Univ. of Mass. October 21, 1949 to give members an opportunity to inspect turf research they have partially financed.

Prof. Lawrence S. Dickinson opened the meeting in the morning by outlining the progress made since turf research was resumed at the University in 1948. He gave some idea of the program to be followed next year, stating that considerable attention to watering problems is justified. Closely allied to this subject is an investigation into foundations for putting greens, a project which is being started this autumn at the University. Variety tests will be continued and expanded together with the study of fertilizer treatments for flat areas and

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-

