



DU PONT C. C. TO OPEN SECOND 18 THIS SPRING

This wooded, rolling terrain is typical of the Dupont course.



THE transformation of a rough, undeveloped terrain, formerly devoted to pasturage, cornfields, brush and scrub woodland, into the smooth undulations of a modern golf course is an engineering project of highly specialized requirements. Usually, the land acquired for such a purpose is the cheapest available, a large acreage being necessary, and frequently it is run-down or undeveloped property. Ordinary methods of clearing cannot suffice for such an exacting task, for the curses of a thousand duffers, groaning in torment, follow him who builds a fairway with cuppy slopes or turf that does not spring.

The Du Pont Country Club (Wilmington, Dela.) used by employees of E. I. du Pont de Nemours & Co., began operations on a new 18-hole golf course during the past summer. The new 6,260-yard layout will augment the fine 18-hole course in use for many years, and occupies an adjacent acreage. Rimmed by woods, it is fully as picturesque as the present course.

The land chosen for the new layout was extremely rough in spots, being heavily marked with the boulders and stones common to the north slope of the Brandywine creek, which it overlooks. A considerable number of standing trees, at scattered intervals, were on the land in positions where their removal was necessary. Other ob-

stacles facing the builders were old stumps, some of great size, and, as is frequently the case in farm land, a number of crumbling stone foundations deep in the earth.

The work was supervised by Tommy Fisher, professional at the club, acting under the advice and counsel of du Pont engineers. Construction of the greens was done by contract labor.

Winter finds the course well on its way to completion, with the newly-planted grass making a brave display on the formerly barren fairways. It is expected that the first ball will be driven next June or July.

Much heavy clearing work was done by blasting with dynamite. Stones and boulders, which littered the fairways in some spots, were the most serious problem. L. F. Livingston, manager of the du Pont Agricultural Extension section, was in active charge of this work. Sizing up each rock, he directed the placing of the explosives in such a way that the speediest leveling of the ground might follow. Some

boulders were blown out of the ground entirely by "snake-hole" loading. Others were "mud-capped" and split, the piece being pulled away by tractor and cable after the blast. In still other cases, where the rock had a huge understructure, its top was blown off and the remainder covered.

Dozens of stumps were extricated with dynamite charges. Some were difficult ones, with involved root systems, but

Grass in the rough was composed of 50% hard fescue, 25% Canada blue, 25% orchard grass.

For the tees this mixture was used:

40% Kentucky bluegrass, 20% red top, 10% meadow fescue, 13 1/3% poa trivialis, 10% seaside bent, and 6 2/3% yarrow. Approaches got the same application as fairways with the addition of a small percentage of seaside bent. All greens have tile underground drainage of the normal farm or soil tile, placed according to slope.

Clubs Continue To Ignore Winter Welfare of Greens Force

By LOUIS DENNIS

ANOTHER winter is upon golf. Foresighted greenkeepers and chairmen already are beginning to wonder about the coming season. New men will have to be hired for the greenkeeping force and trained in the expert work of handling fine grass so delicately that greens will be like carpets and grass diseases and insects kept under control by the deft application of chemicals so powerful that a slight misuse will ruin turf in which is invested much time and money.

There are green-chairmen who still are unaware that it takes time and the close attention of competent greenkeepers to train new men. These chairmen are puzzled by the defects in condition of their courses. Such men probably never will realize that the first requirement for first class greenkeeping is a full-trained, experienced force. The force that has a high annual turnover in labor is working against an unbeatable handicap.

At many courses the greenkeeper has gone into the winter confident that he has done his best but nervous about what may happen next spring in the wage situation and in difficulty of getting his experienced men back. The good greenkeeper has gone into the winter with his equipment repaired into the best possible condition for renewing operations next spring. All equipment has been attended to except the men on the greenkeeping pay-roll—and this includes the greenkeeper when that man is on less than a 12 months' salary.

At this time of the year many greenkeepers and men who were on their forces last season actually are faring much worse than horses, for the men are not being furnished the essentials of living and keeping in shape for good service to the golf clubs next year. The greensman is just turned



Amount of clearing needed is suggested by these before-and-after 7th fairway photos.

proper placing of the explosive succeeded in clearing the land in a record time.

Fairways were fertilized all during the past summer with mushroom soil, spread by hand labor from piles and harrowed in, the amount varying with the character of the soil on various parts of the course. For the greens, the best available soil was composted with mushroom soil all season until fully rotted. Care was taken to eliminate as far as possible all weed seeds, and just before laying, a commercial 6-6-5 nitrogen compound was incorporated into the soil to the extent of about a ton to the green. This soil was then laid in two layers of 4-inch depth and packed.

Seeding of the course was done with a wheelbarrow seeder in two applications at right angles, making a "cross patch" arrangement. 250 pounds per acre were used.

Fairway grass was composed of 40% Kentucky bluegrass, 30% redbottom, 20% meadow fescue and 10% poa trivialis.