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 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% redtop, 20% meadow fescue and 10% poa trivialis.

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.

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

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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.

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Clubs Continue To Ignore Winter Welfare of Greens Force
By LOUIS DENNIS

A NOTHER 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
loose to find his own shelter and to live during the winter the best that he may. There is a matter that sadly reflects on the business ability and sportsmanship of the men who are golf club officials and members.

Lively Golf Schedules Credited with Aiding 1937 Play Volume

LIVELIER competitive interest at golf clubs during 1937 was credited by club officials, members and pros as having been a major factor in making the year's play the greatest since 1930. Approximately 65,000,000 rounds of golf were played last year.

Pros who went actively into the job of helping men's and women's golf committee heads put new zest and appeal into the club playing calendar found a definite relation between the increased interest in events attractive to all classes of golfers, and the amount of merchandise sold through the pro-shops.

Consequently there is a clear prospect that 1938 will see an extension of the profitable 1937 practice of revising club event-calendars, instead of continuing to repeat each year's events with only the dates changed when the schedule for the new season reaches the members.

Credited with having an important part in the nation-wide pepping up of club competitive calendars last year was the U. S. Royal golf kit which contained instructions, suggestions and material for a sprightly season of events at any club. A small fortune was put into this enterprise by the U. S. outfit but it scored as club and pro business developer, so in 1938 the U. S. company will continue supplying much of the material made available last year.

Information on the 1938 U. S. kit may be secured from the United States Rubber Products Co., 1790 Broadway, New York City.

Cameron Again Heads N. J. Golf Course Supts. Assn.

NEW JERSEY Golf Course Superintendents' Association held its annual social meeting at Mountainside Inn, Dec. 13th. After a year of monthly meetings centering mostly on educational programs, and a season of weather conditions that caused many worries, the men and their wives relaxed at a dinner, floor show and dance.

Consistent with their advocacy of long-term green-committees at golf clubs, the superintendents' officers were reelected. Officers are: Pres., John Cameron, supt. of Yountakah CC; V. Pres., Edward Bettis Cale, Canoe Brook CC; Second V. Pres., Lester Moffet, Walkill CC; Treas., Arthur D. Burton, Mountain Ridge CC; Sec., Aleck H. Reid, Twin Brooks CC. New trustee for the next three years is Edward Fogerty, veteran greenkeeper of Shackamaxon CC. Cale still heads the educational and professional improvement committee, and Clinton K. Bradley, Passaic Co. CC, is chairman of the public relations committee.

Further Comments on the Health of Golf During 1937

IN ITS final issue of 1937 GOLFDOM carried the reports of equipment dealers, club officials and pros, on the business situation in golf. Too late for publication in that issue were received the following expressions:

"Golf clubs in the San Francisco section of California are enjoying a revival of the pre-depression conditions, or at least this is our conclusion after observing the change in the general business procedures followed by the golf clubs. Without any exception we find them adding to their equipment as conditions justify, and furthermore they are meeting their accounts promptly. The fact that they do pay their bills without delay indicates that their finances must be in a very favorable condition."

D. E. Graves, Manager, H. V. Carter Co., Inc., San Francisco, Calif.

"The year 1937 is our best since 1931. The average for the five year period preceding and including 1931 was, however, considerably higher than this year's total will be, so there is yet room for much improvement.

"We are hoping, however, that business in general may be allowed to function without further additional organized, or political disruption for a period of at least