

Some Tips on New Construction

By MACK BURKE, *Greenkeeper*
Tam-O'Shanter Country Club, Canton, Ohio

TAM-O'SHANTER COUNTRY CLUB is located five miles Northwest of Canton, Ohio, on a gently rolling tract of ground containing 305 acres. The present course as built is 18 holes, with a length of 6,400 yards, and occupies 138 acres of the whole, leaving sufficient land available for another 18 holes.

The course is planned to be used as a daily fee course, and will be operated by the owners and builders, the T. K. Harris Company, of this city. The course was planned by Leonard Macomber of Chicago and was built by the writer and M. R. Paul as Engineer in charge.

The total acreage of Tam-O'Shanter was acquired piecemeal over a period of three years. The first work was done in the fall of 1926, when 225 acres were plowed and allowed to stand over winter. Construction work was started in April 1927, when the general tiling for the whole area was put in place. This tiling varied from 4-inch to 12-inch tile for the mains, about 23,000 feet being in place by the first of June.

Moving Soil Economically

Brush clearing occupied a large part of this time, and a steam shovel was moved in to cut down several hills along the main road, and for the purpose of grading a parking space. Approximately 15,000 yards of dirt were moved during this operation at an average cost of 34 cents per yard. This was accomplished by renting the shovel and using 3 yd. trucks on all long hauls, some of which were 2,000 feet long. For the shorter hauls, we had six teams serving the shovel for hauls up to 800 feet.

Use of Fresno Scrapers and Steel Rail

Construction on the course proper started with the building of No. 8 green on June 16th, and by August 22nd, all the greens, tees, and thirty traps were finished and ready for the finish grading, prior to seeding. No teams were used on this work, the force consisting of 5 tractors with 4 Groundhog Fresnos and one 15 ft.—40 lb. steel rail for a drag. The dirt for the most part of the greens was moved from traps and we found that the Fresnos were much more economical than teams due to the lesser cost and greater volume of dirt moved per day. The working force consisted of 5 tractor drivers, truck driver as supply man and 30 laborers. Several of the greens had fills of more than seven feet, but this was handled by the Fresnos with ease. The procedure was for the Fresnos to load, haul and dump in place. Immediately afterward, the tractor with the rail drag fol-

lowed behind and leveled off the load. This drag enabled us to secure natural looking greens where the contours blended perfectly with the contour of the surrounding terrain. This is one of the most valuable helps on new construction we have found.

Most of the greens were built larger than those on private courses, as we figured in this way we could expedite play for the newer players, and by careful trapping we could make the course interesting enough for the scratch player. The greens varied from 6,000 to 14,000 square feet each.

Plan of Water System

The water system consisted of a 10-inch drilled well, 90 feet deep, a 5,600 gallon storage pressure tank and a Peerless vertical lift centrifugal pump with a capacity of 150 gallons per minute under a 290 foot head and 300 gallons per minute under a 100 foot head. This type pump was selected after a careful comparison of all other types, both as to first cost and also as to upkeep. The pump is practically noiseless, which was a prime consideration as the pump house was located only 150 ft. from the club house.

Four inch distributing mains of precast pipe were laid from the pumphouse and supply lines were placed on every green, tee and fairway, those on the fairway being 2-inch lines with outlets placed about 80 yards apart. Lines to the green were 1½-inch and to tee, 1 inch. Most of the lines were laid 18 inches deep by means of a ditching machine. Special care must be taken in all leads off the cast iron pipe. We used malleable saddles for all connections on the 4-inch pipe and used full gaskets of lead and rubber, well coated with asphaltum paint.

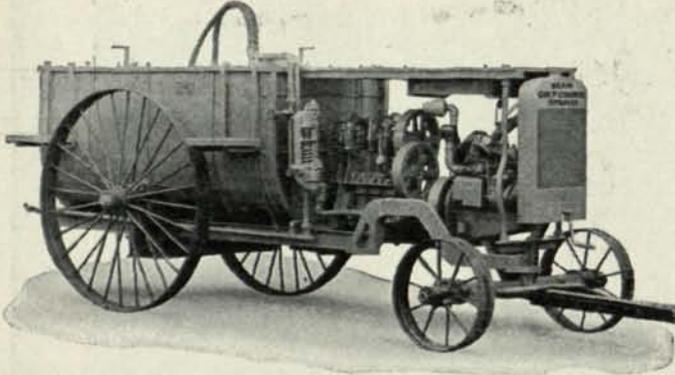
Planting the Course

The greens were planted with bent stolons, Washington strain. Each green had ten men working on it at one time, raking, fertilizing and later planting and rolling. The planting outline was put down and the men worked up to it very closely. Topdressing was screened and stored and on the day of planting was hauled to the greens to be planted. The ten men averaged three greens daily, in planting, topdressing and rolling.

The whole 305 acres were seeded to a mixture of 80 per cent Bluegrass and 20 per cent Red Top, previously being fertilized with a 20-20-4 inorganic fertilizer, applied at the rate of 200 pounds per acre.

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Bean Golf Course Sprayer for Applying Fertilizers, Fungicides and Insecticides



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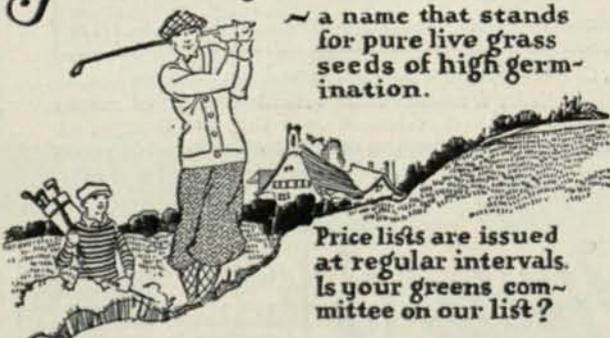
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Tips on New Construction

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Grass seed was sowed 150 pounds per acre on fairways and 120 pounds per acre on the general planting, comprising 167 acres.

A Few Construction "Don'ts"

From some of the developments which have come from this course, we can give constructors the following "Don'ts." Don't work your soil until it is fluffy. It is better in a slightly packed condition.

Don't forget to protect all places where there is a possibility of washes, with sod if available or with a quick growing grain seed.

Don't allow the tile and water ditches to remain open any longer than necessary for this gives settlement no chance before seeding.

Don't use a pipe type farm roller after seeding. This gives uneven pressure and consequently variable growth.

Don't seed too soon after fertilizing.

Don't forget to provide plenty of inlets for surface water to get into the tile lines more quickly than by infiltration.

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Clubhouse Gardening

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masses of color in harmony and something fresh to meet the eye as one proceeds through the grounds.

Developing Color Schemes

A plan that has been adopted for a number of years, though perhaps not general, but which is more definite than some, is to plant out in masses so as to form color grouping. This is both effective in appearance and simple in operation, and may be done by planting from three to nine plants in a group, according to height, form and eventual size of the plants. For example:

Three Delphinium

Three Phlox (decussata type)

Five Lychnis Haageano—Three Lychnis Chalcedonica

Seven Heucheras, Pyrethrums or Aquilegiae

Where dwarf Alpine plants are used five or more may be included according to desire.

(To be continued)

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