the members of the class. The work on this report is done under supervision and direction.

"Drainage is also quite well explained in the syllabus. We hope that they will have some practical work outside in this course. Weather permitting, they will have several thousand feet of drain to put in; that is, to lay the grade for.

"The course is filled to the limit and everybody seems to be happy. Personally

I am more than gratified with the results,—cooperation of the greenskeepers, the manufacturers, and the seed houses is unusually good.

"We are having a number of outside speakers talk to the class and hold round-table discussions. For example, one week we have a landscape architect and two lawn mower specialists. We have booked a golf architect of country-wide fame, seedsmen (not seed salesmen), business managers and several other men."

Twelve Month Season Strains

HAT the humid nights, claimed by many to be responsible for brown patch, may not be the source of the evil after all, is the conclusion Edward B. Dearie, Jr., a prominent greenkeeper, says is being forced upon him by a comparison of the conditions in eastern and central states with the conditions prevailing in California. Mr. Dearie, who is secretary of the Mid-West Greenkeepers' Association, is spending winter in California the and comments, "Bent seed has been sown on quite a number of courses, both new and old, and has given beautiful turf, but I

noticed our old foe, brown patch, on a number of these greens. At the San Pedro club greens showed brown spot right plain in January, in this land of sunshine and cold nights, so where is our Illinois humid night story going to stand?"

Other of Mr. Dearie's observations made during an inspection of approximately 30 courses in the Los Angeles district and southward to San Diego, concern the way in which the Californians are handling the difficult problem of maintaining courses ir first class condition for 12 months a year play. He states:

"The 12 months' play makes the upkeep of the southern California clubs an unending job, that is being constantly studied by an earnest and able group of greenkeepers and chairmen. Probably the best tests of golf around Los Angeles are, in my opinion, afforded by the courses at the



EDWARD B. DEARIE, JR. Ridgemoor Country Club

Lakeside Country club at Culver City and at El Caballero, the scene of the \$10,000 open event. El Caballero is in splendid condition. All fairways have a beautiful stand of blue grass and the putting greens have a wonderful putting surface for a course two years old. These greens were sowed to bent.

"Greenkeeping in California has made remarkable strides in the last few years considering the soil conditions. No other state in the Union, I believe, presents such a variety of soil conditions. A wide diversity of geological formations are found in the state. The

soils themselves range from those at the foot of glaciers to those in the midst of deserts. There are courses on meadows 6,000 feet above sea level, and some that border the burning sands of the sub-level plains. Naturally this wide range of soil conditions gives the California greensmen problems that often call for solutions greatly different from those that fit the cases of other courses in the not distant neighborhood. This has been one of the factors that delayed the general introduction of all grass courses to California.

"Irrigation is one of the weighty problems, due to the demand that the long playing season makes on the water supply. This constant watering makes Bermuda grass most prevalent on all of the fairways in southern California. This grass turns very brown in the winter. The later built courses are comparatively free of this pest as they are sown to Kentucky blue and rye grass (rough) and sheep fescue (fairways). Fairways are almost solid with bluegrass. This grass does very well in this southern California climate.

"The vegetative method of developing greens here has been one of question, but I want to say that the greens at Lakeside (Culver City) planted with Metropolitan strain are the best greens in southern California by far, in my judgment. They are similar to our eastern greens and have a splendid, true putting surface. I am surprised that they have not adopted this method of developing greens more extensively as this strain seems to have adjusted itself to the climate. There are a number of courses here that could be converted to bent by the vegetative method in a very short while. The study of vegetative planting of greens in California apparently has not been very deep and as a matter of individual opinion it's my belief that they are overlooking a very promising field. My experience leads me to believe that creeping bent of a good strain planted vegetatively will supersede other methods."

Further on the brown patch peril Mr. Dearie refers to, it attacks mostly after the heavy rains.

More Small Wells Make Saving for Club

MISSION HILLS Country club, one of the new bright spots in the Chicago district, has made a strong point of business management since its inception. This business-like policy already has steered the club safely around assessment perils, one of them being associated with the highly important matter of water supply.

The Mission Hills early members were confronted right at the start with the possibility of having to go around 1,400 feet deep for sufficient water. This dilemma was wriggled out of in the following satisfactory manner, which is described by O. A. Nash, president of the organization.

"Had we had sufficient money to drill a well all the way down to Potsdam rock we would have had no problem at all, as we were assured that at that depth (about 1,400 feet) we would have no trouble in finding enough water for our requirements —about 60 gallons per minute. We did not have enough money available so decided to try and get our water from a shallow well; a 12-inch bore going down into the limestone or about 400 feet. We did this and much to our disappointment found only a little better than 30 gallons per minute. Then our problem became a real one indeed. At first it appeared as though we would be obliged to go down a thousand feet more at a cost of around six dollars per foot which meant just one thing, that bugbear of all golf clubs—an assessment. One of our appeals to new members is the fact that we give them a full equity in a championship north shore golf course for a very moderate cost and propose to have no such thing as an assessment

"Our only alternative was to put down another shallow well, but at first glance this also would cost considerable money and we would have no assurance of solving our problem. I appointed a special committee of men well qualified to look into the problem to see what the cost would be. After considerable investigation they reported back that strange as it might seem that the cost of putting down another shallow well in the opposite corner of our property and near three of our putting greens and our temporary club house would be practically nothing!—if we could get as much water from the new well that we proposed to drill as we received from the first one. The savings made in not being obliged to bring pipe down so as to water the three greens just mentioned, plus the saving affected by not being obliged to dig a trench below frost line to carry water down to the temporary club house, just about off-set the cost of another shallow well.

"We therefore ordered the new well drilled and with only an 8-inch hole, found better than 70 gallons per minute at 180 feet, and solved our problem at very little if any expense."

Park Ridge Makes Double Use of Water Hole

OLFDOM'S front cover illustration shows the pond in front of the ninth green at the Park Ridge (Ill.) Country club. This water hole not only is a feature of beauty at one of the best land-scaped courses in the Chicago district but it has value as a strictly utilitarian feature, being used as a water reservoir for reducing the amount of pumping equipment necessary and for tempering water before its use on the greens.