strains the best, but did not have enough of them on hand to work with immediately. C-1 (Arlington) is not as pleasing to the eye (is a grayish green), but will stand a lot of wear, tear and neglect; is very resistant to disease and insects, also is heat and drought tolerant. The grass when moved at 3/16" forms a tight and dense sod of good texture and putting surface.

The use of aerifiers open up a new field in turf maintenance. Through their use, it is now possible to resoil an area; to get fertilizers, lime, water and air down into the root zone of the growing plant. It will help to provide a deeper root penetration, will afford better drainage and prevent surface puddling, and will restore resiliency to a hard green. A little more experimentation on the part of its owners will uncover many uses for the machine on fairways, greens and tees.

DRAINAGE

An easy temporary answer to the drainage problem, though not as effective as tiling, is vertical wells. Sometime back while reading an article by an English turf authority I ran across this suggestion for the improvement of putting green drainage. His plan was to bore deep holes through the soil until bed rock was hit. The tool used was a soil auger equipped with extension handles. These

vertical cores are placed wherever water pockets occur and the surface drainage is poor.

Last season we purchased from Sears, Roebuck one of their ten inch post hole diggers and four extra extension handles. With this outfit it was possible to dig a hole 20 ft. deep.

In the late fall I decided to follow the advice of the Britisher and went about the work in the following manner: During every rainy spell I watched and observed the portions of our putting greens that held water and marked them with wooden tees. The turf was then removed with a ten inch circular sod cutter, then a hole was bored until solid rock was hit. These borings averaged in depth from ten to 20 ft. All of the old soil was removed, and the refill was with crushed stone to within six or eight inches of the green's surface. The top fill was with a porous sandy soil followed by the replacing of the turf.

Since putting in these vertical drainage cores I have watched the bad spots during periods of heavy rainfall. They still hold some water, but it disappears much quicker than before, especially so if probed with a sharp instrument.

This method is not given as a cure-all, nor is it as effective as a good tile drainage system.

Pro's Business Expenses In Big Increase

Pros who keep books accurately are talking about pro expense of doing business rising higher in percentage than salary guarantees and volume. Pros point out that extension in pro service has accounted for considerable increase in expenses that in many cases more than offsets net profits from increases in shop volume.

Difficulty and expense involved in getting good assistants competent to do a satisfactory job on lesson tee and in shop also is causing concern to pros. Clubs are helping more than they used to, except in cases of first class clubs where it has been pretty much standard practice for clubs to assume all or a substantial share of assistants' room and meal charges.

Pros in listing their costs of doing business list:

Collection losses on sales.

Merchandise stolen or uncharged.
Cost of own playing equipment.
Cost of own sports wardrobe.
Caddy hire.
Assistants.
Assistants' board and room.

Shop merchandise costs. Shipping charges. Advertising. Postage. Prizes. Business entertainment. Bookkeeping. Buffing machines. Club-cleaning supplies. Repair material and supplies. Painting of shop. Shop furnishings. Cash register. Insurance on members' clubs in storage. Insurance of shop stock. Golf accident insurance. Automobile use in club work. Tournament expense. Collection expense. Replacements of clubs and balls (which pro has to make to retain good will, but which manufacturer may proper-

bags.
Time devoted to free class lessons.
District meeting expense.
Telephone tolls.
Taxes.

to allow.)

ly regard as unfair claims and refuse

Replacement of equipment lost from