the tile size varying from 4 in. to 2 ft. Much of it lies in quicksand with overlying muck bottom soil. To replace or to relay tile under these circumstances, costs run excessively high since digging operations present more than the usual problems such as caving and shoring and difficult grading. Reboaring, however, made digging unnecessary and we were able to have 4,000 ft. of tile cleared and cleaned for approximately twice the cost of relaying 100 ft. of 20-in. tile, four years earlier (and, incidentally, tile costs were less then).

What's more, with the exception of two instances where the power rodding revealed broken tile and in another section where no catch basin existed, the sod was left undisturbed. In areas where the ground was particularly soft, equipment mounted on special, lightweight, large-tired trailers was used to prevent damage to the course.

When systematic use of copper sulphate falls, power rodding is the answer to the most persistent golf course drainage tile problem—tree roots. It's fast, thorough, economical, does not interfere with play and does not mar the beauty of the course.

Routine Work Demonstrated By New England Supts.

Golf Course Supts. Assn. of New England recently staged an educational program on routine procedures in maintenance. All supts. (including non-members) in New England were invited to attend and bring their key men.

Those present said the "refresher" lessons were very valuable in calling attention to details that have been improved in doing work that generally is so much standard operating procedure there's a tendency to skip education of maintenance employees.

The program:
Care of Traps and Aprons—Bill Ash
Mowing Greens—Phil Cassidy
The Operating Mechanics of Power Greens Mowers—Albert Allen
Changing Cups—Guy Tedesco
Top Dressing Greens—Paul O'Leary
Fertilizing Greens—Howard Farrant
Watering Greens—Ted Murphy
Fine Turf Identification, etc.—Manuel Francis
Use of The Proportioner—Arthur Anderson
Tees—Changing Markers, etc.—Arthur Cody
Weed Control—George Webster
Fairway Mowing—Narry Sperandio

Supt. Looks Calmly At Golf Car Problem

BY JAMES W. BRANDT
Supt., Danville (Ill.) Country Club
(At Midwest Regional Turf Conference)

I believe that Bill Daniel asked me to serve on this panel dealing with golf car use from the superintendents' viewpoints because two years ago, while serving on a similar panel, I made a rash statement.

Then I expressed the opinion that golf was played for the exercise of the sport and for that reason motorized cars on golf courses never would be much of a maintenance problem. I must admit that I was far from being correct.

Now, having confessed to my error, and being somewhat balméd inwardly by the suspicion that I am not the first and only one to make a wrong guess in golf, I will tell you how I adjusted myself to the reality of the golf car being here to stay and growing in use.

My present second-guessing may help other superintendents and chairmen prepare to handle the golf car situation.

Preparing for golf cars I would say comes in two phases: First, the superintendent must prepare himself mentally; second, there are some physical changes that may have to be incorporated into the course.

I would like to try to point out to my fellow superintendents that the advent of motorized cars isn't the worst calamity that has befallen superintendents. To do this, I will take you through the reasoning process I followed before I realized that cars weren't so terrible.

Let me ask the question "Why were we hired?" We were hired to maintain a course that will be well groomed and a pleasure to play. If golf were played primarily for exercise, then as much exercise could be obtained from the playing of a course maintained at the cow-pasture level as could be attained from playing a finely conditioned course. Golfing superintendents who work all day on the course certainly do not play golf in their off-duty hours for the exercise, fresh air, or sunshine. They play golf for pleasure.

If a portion of our membership derives greater pleasure from the use of cars, then should we object to their so doing?

For a moment let us look at the brighter side of the motorized car picture and see what it may do for our course:
1. May enable physically handicapped members to play.
2. May start some of our older members to playing golf again. They are the ones who often control the purse strings on funds needed for good maintenance.
3. May help balance play on both nines.
4. Make for a longer golfing season. Can be used when caddies are not available in spring and fall.
5. Source of increased revenue for pro or club.
6. May enable you to secure funds for needed bridge and road improvements.
7. Course may receive more play when ground is hard and dry.
8. Little permanent damage to turf if cars are properly handled.

There may be other advantages to cars that can be brought out.

Now to the darker side of the picture. By this I mean the added work and worry that cars may cause us superintendents.

1. Footbridges may have to be changed, strengthened, or widened. On our course we had to widen a 140 ft. bridge. The bridge had to be refloored and was widened at the same time.

2. Steep inclines may require blacktop or other treatment in heavily traveled areas. Some of the revenue from car rental is to pay for the cost of material on our course for two areas that require blacktopping.

3. Turf in heavy use areas will require special attention. This year we are to try heavy aerification, and other types of grass such as zoysia and Bermuda will be tested in these areas.

4. The superintendent must be judge as to when cars are not permitted on course.
5. Rules governing use of cars must be made. They should be kept to a minimum and as simple as possible. Rules should be on each car.
6. Work with the pro to keep the distinguished executives from becoming hot-rod enthusiasts on the course.

Many other problems will arise, depending on the course.

If you do not have cars on your course, do not be as naive as I was for two years and think that you will never have cars, but think ahead and be prepared for them when they are in use on your course. They are here to stay.