#### CHECK THESE 32

1 Your chairman will appreciate a report from you on what equipment and supplies the course *must* have next season and another list of present equipment and supplies that are out of date, inefficient, and in line for replacement. Don't hold back on a single item you'd like to have; later you can sit down with the chairman and blue-pencil the non-essentials, budget considered.

2 Early this fall, tour your entire course with your chairman and make a survey of the course's fertilizer and seeding requirements. You probably know by heart what is needed and where, but your chairman doesn't; so take him to the needy areas and show him.

Fall and winter are good times to lower 3 Hall and winter are good times the gradient of mounds alongside fairway traps so that they can be mowed by fairway units rather than by hand mow-ers. Labor savings in seasons to come will more than pay the cost of reconstruc-

4 As a source of self education, write your state agricultural experiment station, and to the Department of Agriculture in Washington. Ask both for a list of publications available on turf culture, insect pests, bird protection and any other subjects in which you are interested. These lists are free, and the publications are generally free or not more than 10c each in a few cases.

5 Winter-kill and snow mold are pre-ventable, and late fall and early winter, before the snows come, is the time to save yourself a lot of turf repair work next spring.

Just as soon as possible, check over ev-6 Just as soon as possible, check of the ery piece of machinery you have for worn parts. Make a list of these parts and submit to your chairman for OK; then see that the orders for these parts are mailed the manufacturers or your supply dealer in plenty of time, so the parts will be on hand when you give the machines their winter overhaul and re-assembly.

7 Is your maintenance shed arranged for maximum efficiency? Has everything a place and is everything in its place? Nothing easily liftable should be leaned against a wall or stored on the floor in the corner. Put up hooks, shelves and racks for such equipment.

8 Porch and lawn furniture need a thorough going-over during the winter. Wooden pieces need tightening and painting; metal furniture will probably need some straightening and then paint.

# WINTER

Ball washers need an annual overhaul. 9 Replace worn brushes and paddles, give the containers a new coat of paint, and don't forget the posts on which the washers are mounted. Check prices; it is sometimes smarter to buy new washers than to repair old ones.

10 Go over the clubhouse, inside and out, with the club manager and determine what repairs, improvements and maintenance work you and your crew can do this winter. Painting, plumbing repairs and minor construction jobs are well within the ability of the club's staff to do

11 Yardage markers, out-or-bounds signs, tee plates and other signs about the course should be brought in for overhaul, Yardage markers, out-of-bounds signs, replacement, repainting and re-lettering. Take up with your chairman whether more signs and markers are needed. If you use the permanent, metal type, get his O.K. to order them.

12 If your chairman isn't sympathetic to the idea, talk to the chairman of the women's golf committee and ask her to raise a small fund with which to buy crushed grain and suet for the winter birds. A bale or two of straw opened up and thrown haphazard over a patch of low bushes will form an ideal refuge and windbreak to protect the birds against winter storms.

The birds will repay you by devouring countless thousands of hibernating insects

and insect eggs.

13 It is often easiest to repair bridges in the winter while the water is frozen, so you can get underneath the bridge planking and work standing on a solid surface. New supports are easier to install when there is no surface water to grope through.

14 If you are planning extensions to your watering system, especially mid-fairway snap valves, lay the pipe on the surface of the ground, coupled and in position, during the winter. In the spring, when the ground thaws, the pipe is all ready to be buried and the ends connected to your present system.

15 On cold days when the ground is frozen and there is little or no snow on the course, concentrate on hauling, such as sand to traps, crushed stone for road fill and logs for firewood in the clubhouse. Wheeled vehicles can run over turf with minimum damage at such times.

16 The banks of your waterways need an annual inspection. You'll find many spots where reinforcement is advisable, and cold, clear weather is the time to do such work.

# GREENS

17 At the start of the winter season, prepare a list of all the jobs that lie ahead for you and go over it with your chairman. Get his authorization for such expenses as will be incurred before he gets tied up with the holiday rush in his own business.

18 You'll probably find plenty of fence repairs waiting for attention after a season's play. Do a thorough job; makeshift repairs often mean more work on the fence in mid-season, when you need your men for regular greens duties. Late fall is a good time for new fence placement.

19 Assuming you keep your copies of GOLFDOM, and other turf publications, winter is the time to start your reference file, or to bring it up to date if you

have started one in the past.

Buy a loose-leaf binder and insert a sheet for every letter of the alphabet. Whenever an article appears you may want to refer to in the future, write the title of the article, the name of the magazine, the issue and page in its alphabetical order in your binder. Thus, an article on "Brown-patch" might appear thus on the "B" page in your binder: Brown-patch, GOLFDOM, August, 1939, page 34."

20 You probably will not be able to keep your whole greens-crew through the winter. But you still want to hold the men for next year. A thoughtful move is to ask your chairman to send a letter to the entire membership asking them to advise you when odd-jobs come up around the members' homes. In this way you can help your men earn a living through the lay-off months.

21 Time can profitably be spent reconditioning and sharpening the many small tools in the maintenance barn. This applies not only to carpenter's tools, but

also to shovels, rakes, scythes, hole-cutters, and the like.

22 If your mowers seem to need only minor repairs, tackle the job yourself; but if a considerable overhaul is in order, ask your golf course supply dealer to quote on the job. He is better equipped to put the mowers in perfect shape, and his charges are not out of line. If the dealer is to do the job, get your mowers to him early; don't wait until spring, when he'll be jammed up with repair work.

23 Sprinklers need a complete inspection; some may need replacement. Scale should be cleaned out, worn parts replaced, and after reassembling, do a paint job.

### DUTIES

24 Shortly after the first of the year, the various universities and agricultural schools will be opening their greenkeeping short courses. If at all possible, plan to attend a course. The last minute information you will acquire will make you a much more valuable club employee. For this reason, your chairman is shortsighted if he neglects to include your expenses while at the short course in his greens budget.

25 Bring in the tee-benches from the course, singly or all at once. Each bench needs first of all a good scouring, then careful inspection of all planks, braces, bolts and other parts for needed repairs. Replace worn parts, then paint the bench with good paint. Remember the bench has to stand all next season in every sort of weather; good paint is an economy.

26 If you plan any landscaping work involving the shifting of shrubs and small trees, winter is the time to do this. The earth-ball method is foolproof if the ground is frozen; a lot more work if attempted at any other time of year.

27 Among the course equipment which should be gone over, don't overlook the bird houses. Take them down, replace rotted wood and repaint early this winter. Then put the houses out to weather, as birds will not nest in freshly painted houses.

28 Late fall and early winter is a good time to visit the woodland areas bordering the fairways of your course with the object of clearing out the underbrush



New South Wales greenkeepers are shown taking examination for certificates of competency, with A. J. Mollineaux and R. J. Withycombe, of the N.S.W. Greenkeepers' Assn., in charge. Aspirants for greens jobs at U. S. clubs may soon be taking similar fitness tests. (Photo Courtesy Golf In Australia.)

#### G. S. A. Studies Greenkeepers' Fitness

EACH member of the Greenkeeping Superintendents Ass'n was asked early in August to submit to Secy.-Treas. A. L. Brandon a list of 15 questions which might be used by officials of golf clubs in determining the knowledge and qualifications of applicants for greenkeeping positions. Prizes are to be awarded to the three best lists.

The GSA feels that too many glibtongued outsiders, inexperienced and thoroughly unfitted to be in charge of course maintenance, have fast-talked themselves into greenkeeping jobs with clubs. After one of these gents has had time to spoil the layout he was hired to maintain, the club fires him, perhaps learns its lesson and next time hires an experienced GSA man, or perhaps repeats its mistake.

But if, in the first place, the club had available a set of questions or its choice of several sets that would accurately measure an applicant's fitness for the superintendent's post, most of the gamble of hiring a greenkeeper would be removed. And the GSA can use a series of questions to determine if a man is qualified to be admitted to membership in the association.

According to Brandon, the question contest drew a desk-load of entries, and the judges—John Morley, Fred Burkhardt and John MacGregor, all ex-presidents of the ass'n.—are finding it a bigger job than they had contemplated selecting the prize winning lists. At press time, winners' names had not been announced.

so that next season's golfers will have less difficulty finding off-line shots. But wherever practical, leave the underbrush as a bird refuge.

Winter is the time to put the shop bench in complete working order. Take an inventory of your small shop tools. Have you enough wrenches, screwdrivers, drills, hammers, files and saws? How's your supply of nails, screws, bolts, washers, cotters and emery cloth? How about shellac, glue, turpentine, oil, kerosene, grease and alcohol?

30 In any discussion you have with your chairman concerning the need for new machinery, keep constantly in your mind and in his the fact that worn-out or

outmoded equipment takes its toll in added upkeep costs.

31 It is far easier to convince the green-committee that the putting greens need improvement than to sell it on the fact that your fairways need attention. If a general fairway feeding program is simply not in the cards, get an OK to make a test feeding on a limited fairway area. A year from now, the results will do the rest of the selling.

32 What is it costing you to pump water? Your pumps may be woefully inefficient compared with late improved models. You can obtain operating costfigures from pump manufacturers to compare with your own equipment's drag and soon determine how much of a new pump's purchase price can be saved the first year.