variety, camellia japonica and camellia sasanqua, flowering quince, the shrub jasmine, plumbago, lantana, hibiscus, halvaviscus, etc.

## Vines

Vines also have their use in enhancing the beauty of the course where suitable trees or fences are available on which to train them. Some of the most colorful ones are wistaria, bougainvilla, several varieties of Bignonia, Alamanda, coral vine, the red honeysuckle, star jasmine, tecoma and many of the climbing roses which are adapted to the far South such as the native white Cherokee, Mermaid, the white and yellow Banksia, and the old-fashioned climbing tea roses. These roses will usually thrive without spraying but should be planted with good soil preparation and should be fertilized adequately every year.

## Naturalized Flowers

Another way to add seasonal color to the course is by planting flower seeds which naturalize well in the odd corners or even perhaps in some of the roughs such as annual phlox drummondi, gaillardia, California poppy, toadflax, vinca rosea, and the common petunia. All of these are grown in rather poor sandy soil where the grass is thin or non-existent. Seeds are scattered generously in the fall to bloom in the spring and summer.

## Simple Maintenance Cost Records Are Urged

Western Missouri and Kansas superintendents in their Heart of America Association Turf News outline a course maintenance cost record system that involves the minimum of paper work.

The system recommended:
Adequate cost records are a necessity to the efficient operations of a golf course. Unit costs are the only way for a committee chairman or superintendent to determine the proper amount to spend on each operation. In appearing before a board of directors, a chairman or superintendent with accurate cost records to back up his requests has the battle half won.

In all clubs, minority groups will at times advocate changes in maintenance practice and design, which are neither good golf nor sound maintenance. These pressure groups can sometimes be stopped by accurate cost records before they become a problem.

A golf course superintendent, working long hours, seven days a week, is prone to neglect paper work. He has little time for complicated forms and feels his time is better spent in seeing that the maintenance work is properly performed. Not having an office force at his disposal, he wants to keep paper work to a minimum. The following minimum is suggested.

Divide your maintenance work as follows:

GENERAL EXPENSE: Your salary; subscriptions; expenses to conferences and short courses and other items not directly chargeable to a particular division of golf course maintenance.

PUTTING GREEN MAINTENANCE: Mowing; watering; fertilizing; spraying; aerating; weed, disease and insect control; and miscellaneous, such as changing cups.

FAIRWAY MAINTENANCE: Mowing; fertilizing; seeding; weed control; aerating and watering.

ROUGH MAINTENANCE: Mowing; fertilizing; seeding; weed control.

TEE MAINTENANCE: Mowing; watering; seeding; weed control; fertilizing, and miscellaneous such as changing markers and service to ball washers.
TRAP AND HAZARD MAINTENANCE: Mowing; raking sand; weed control.

MISCELLANEOUS: Maintenance of water lines; service drives; service buildings; shelters and any other items chargeable to the golf course.

GROUNDS AND BUILDINGS: Mowing; spraying; care of flowers, shrubs and trees; repair to buildings.

Procure an accountant's work pad with 12 to 14 columns. Use one sheet from the work pad for each division each month. Use a column for each sub-division and a column for supplies and one for repairs. At the end of the day, enter the hours chargeable to each sub-division in the proper column. When you O.K. an invoice for the club bookkeeper, enter the amount on the proper page. 5 to 10 minutes a day will do this, if you do it every day while the day's work is still fresh in your mind.

At the end of the month, total the columns on an adding machine; multiply by the hourly rates to get the labor costs. Add the cost of supplies and repairs and you will have an accurate report of your expenditures for the month. At the end of the year, an hour with the adding machine will total the monthly sheets, and you will have the answer to many questions.

The above minimum has been used and proved adequate. The plan can be expanded to any extent you may desire, according to the amount of detail wanted.

Your totals will enable you to submit an intelligent annual report to your chairman. He, in turn, can use your report as a basis for his report to the board of directors. If you have done a good job with the amount of money provided, you have the facts to prove it. At times, accurate cost records can be your greatest asset.

