horse chestnuts, and American linden trees are very satisfactory.

Common sense should rule the selection of trees. Choosing the right varieties is the starting point of shade tree success. The most painstaking care may be given to planting and cultivation but, if unsuitable species have been selected, results will be disappointing. While pines and Carolina poplars are beautiful trees, they do not belong on golf courses. Any species having brittle twigs and easily detached leaves is not desirable either.

The rough is no place for an orchard as it is likely to become too attractive. Whenever possible, perfectly-shaped trees should be planted as misshapen trees seldom improve with age. Deformed trees may be attractive in rugged surroundings but generally they look out of place on golf courses.

The choice of proper varieties of trees should not be difficult. Factors to be considered are adaptability to the climate and soil, desirable size at maturity, density of shade and ability to withstand local plant diseases and storms. Advice on the best species can be obtained from state and national departments of forestry. Local nurseymen should be well informed and their advice should not be ignored as it is to their advantage to make suitable recommendations.

Climatic conditions should be given first consideration in the selection of trees. Mountain trees usually do not grow well elsewhere. It is foolish to send long distances for special varieties of trees for in most cases they will not thrive out of their native environment. Cases are known where pines, firs and spruces have been shipped long distances at great expense only to die in the lower altitudes.

HUBBARD NURSERIES
CREEPING BENT STOLONs
*Washington and Metropolitan Strains*
Pure, free of weeds, and of one season's growth

DR. AMOS F. HUBBARD, N. Kingsville, Ohio

CAREFUL CULTIVATION IS IMPORTANT

It must not be imagined that trees may be carelessly planted and then neglected. While they do not require much attention when mature, they should have considerable care when young. It is only common sense to give them this care in order to protect the investment and to allow them to become as attractive as possible. To obtain the best results the soil about trees should permit the roots to obtain plenty of water.

Trees should not be planted in clay soil which will prevent surface water from seeping down to their roots. Many slow-growing varieties will show better growth under proper care than fast-growing species left to shift for themselves. All trees should be inspected at least every three months. Dead limbs or dying branches should be sawed off and the stubs protected by antiseptic treatment so that decay will not attack the trunk.

Surgical work upon the larger specimens requires the attention of a specialist skilled in this line of work and usually it pays to have such a specialist inspect the property once a year. Often many fine trees may be preserved which is certainly a fine investment.

When transplanted, trees should be of suitable size and the trunks should be at least three inches in diameter. Most trees take a long time to develop and it must not be thought that they can be planted in the fall and reach maturity at the commencement of the next summer. The yearly growth of trees after a certain stage is almost unnoticeable.

Cheap trees seldom are economical. A silver maple will have to be replaced at about the time that a red oak or beech has reached its best development. The planting of short-lived trees should be
avoided not only because of the additional expense but because the appearance of the property is likely to be mutilated temporarily. The actual cost of a tree is only a small part of its expense. Cheap trees, which require an excessive amount of attention or fail to develop properly, are really expensive.

Many desirable uses may be found for trees removed from areas occupied by the fairways, greens and tees. Sometimes quite a number of trees must be cut down when the property is cleared. Large trees may often be used in the construction of a rustic clubhouse. Smaller trees are very useful in the making of rustic benches and in the building of rustic bridges and fences which will add to the general attractiveness of the course.

**DOUBLE FAIRWAYS DIVIDED BY TREES**

Double fairways may be divided very attractively by trees and plantings of shrubs which will reach a height of about five feet when mature. The beds should be about 100 feet long and 10 feet wide. Dogwood, bridal wreath, barberry, lilac and white thorn are always popular. These bushes often add color to monotonously green fairways and set them off to fine advantage. Such plantings require a certain amount of attention but it may be given to them when work cannot be done on the rest of the course without interfering with play. Labor spent upon such landscape features always pays fine dividends.

Border plantings of shrubs in some cases may be more desirable than trees. Spring and autumn beauty may be provided by mannyberry, white thorn, and dogwood bushes. Sumach, cranberry and hawthorne bushes also are desirable.

Water features of the course present many opportunities for landscape artistry. Winding lagoons and sparkling lakelets, beautiful in themselves may be made still more beautiful through pond lillies and fringes of graceful willows, blue flag, marsh marigold and lotus. If rocks are available, they may be used to create artificial cascades and stepping stones.

**Next Month—Bringing the New Course Along**

Pacific Coast Gossip

By ARTHUR LANGTON

In all but the most northern portion of the Pacific Coast, greenkeepers even now are preparing, not to settle down for the winter, but to receive the hordes of tourist golfers demanding days of perfect playing weather and courses of polished perfection.

The visitors probably will get a large measure of that which they seek, although Indians and government weather bureaus unite in predicting a rainy winter for California at least. The government’s report is based upon the fact that in Alaska a cool summer has been experienced, thus keeping cool the current which bathes Pacific shores (or it may be that the coldness of the current has kept Alaska cool). This low temperature, say scientists, almost invariably is the forerunner of a heavy precipitation.

Any downpour above normal will be welcomed by Southwestern greenkeepers inasmuch as the annual rainfall has been below normal for several years. In fact, the last fifteen years have been deficient, but scientists at the University of California claim that the next decade will see a decided rise in rainfall figures. This prediction is based upon a learned and intensive study of sun spots.

However, eastern golfers who are planning their annual visit to the coast need have no fear that their golf will be confined entirely to the indoor variety more than in the past. It is to be expected that Washington, Oregon, and Northern California will receive a lot of rain; because when do they not?

The old saw originated in this territory about the visitor asking the native if it rained all the time. The native assured him that it did not since “sometimes it snowed.” Of course, no native will admit of ever having said anything like this because the weather most of the year is delightful and perfect for golf.

In Southern California the rainy days rarely exceed more than fifteen and in some places there is none at all. Arizona is safe for the winter golfer as its rainy season is already over. It is not saying too much to predict that Arizona will become much more popular as a winter golfing resort than it is now.

At present there are only half a dozen all-grass courses in play in the whole of the state and these are constantly
faced with the probability that brown patch will claim a large percentage of their greens annually. Greenkeeping is in its infancy, however, in this state and little has been learned of the prevailing peculiar conditions.

According to Jack G. Ashworth of the El Rio Golf and Country Club of Tucson, greenkeeping is anything but a pleasant pastime what with transient labor, a galaxy of insect pests, rodents, almost no rain, and a temperature which soars above one hundred and twenty-five degrees in the summer months. This year was especially hard on Arizona because even its little rainfall was late and short.

Coming back to California we find that after a winter with subnormal rains this year, cool weather prevailed until July and August when a sudden hot spell aroused considerable anxiety on the part of greenkeepers as to the welfare of the finer grasses. Heavy application of preventatives saved most of the greens from the ravages of brown patch, although some of the inland courses suffered heavily.

During the present season the disadvantages of Bermuda grass, capriola dactylon, as a turf maker become increasingly apparent. This plant, popularly known as devil grass, provides a good playing mat throughout the early summer, but then sends out long, coarse runners which, if they be on a green, must be painstakingly dug out, else they cause the ball to hop.

Besides this, Bermuda turns yellow and brittle in the winter so that whole fairways look parched even though they receive plenty of water. In some sections of the state there seems to be little that can be done about it since it inevitably chokes out all other grasses. It thrives on hot sun and lots of water.

In and around Los Angeles, greenkeepers are polishing their courses in preparation for the midwinter tournaments when most of the golf notables flock to this district for the glittering prizes offered. Present indications point to the Wilshire Country Club as the venue of the next Los Angeles Open tournament. It was played here in 1928 when the canny MacDonald Smith led the pack over its gilt-edged layout situated in one of the most expensive districts of the state.
THE Annual Midwest Greenkeepers tournament was held September 8, at the Medinah Country Club, over number 1 course. Play was over eighteen holes. After the clearing of the divots and free oral exclamations, we find in the aftermath, Andy Gillett of Harlem Hills, Rockford, the possessor of the cup which signifies him as the 1930 champ.

Needless to state that Mr. Ralph Johnson, Superintendent of Medinah, had everything groomed to perfection.

A resume of the tournament winners:

Andy Gillett, Harlem Hills.
Gus Graham, Glenwoodie C. C.
Lewis Cox, Medinah C. C.

Driving Contest:
1st. Stanley Arendt, Meadow Grove C. C.
2nd. Alex Binnie, Shoreacres G. C.

Blind Bogey:
Chas. Korsgren, Skokie Country Club.

Low Gross:

Stanley Arendt, Meadow Grove C. C.

Strokes Galore:
John MacGregor, Chicago Golf.

Putts: (Least number):
J. T. Langell (L. J. Norris Private Course).

The cup donated by our worthy President, Matt Bezek, for the best 3 rounds played at our meetings this season, has not as yet been awarded by the tournament committee.

The Shoreacres meeting turned out to be one of the best of the current season, with home cooking and everything—the cooking and serving was done by Mrs. Alex Binnie and daughter—certainly the home cooking turned advantageously to those who played golf as it gave the necessary stimulus to conquer the ravines and canyons.

The September meeting will be held September 29 at the Chicago Golf Club, Wheaton, Illinois. The well-known Mr. John MacGregor does the greenkeeping—and how!
Market Place and Buyers' Guide

Where reputable manufacturers and dealers list and describe their products. Greenkeepers are requested to write the Market Place for any special information they desire about supplies or equipment.

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**OUTSTANDING ACHIEVEMENTS IN THE PRODUCTION OF FINE TURF**

Buckeye Brand Seaside Bent Seed
Genuine Coos County Strain

Prince Edward Island Bent Seed

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Velvet Bent Seed
All Government Inspected Sealed and Certified

**The J. M. McCullough's Sons Co.**
316 Walnut Street, Cincinnati, Ohio

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**FOR BETTER GREENS**

Use a Hardinge Mower Sharpener

**MFG. BY**
HENRY H. DOTY
Glenview, Illinois
Market Place and Buyers' Guide—Continued

New Jacobsen Gang Mower Attachment

The latest development of the Jacobsen Manufacturing Company, Racine, Wisconsin, manufacturers of power lawn mowers, is a special gang mower attachment. This gang mower attachment has been designed to hook onto the front of regular Jacobsen 4-Acre Heavy Duty mower with rubber tired wheels, which gives the mower two extra cutting widths, or three in all, with a cutting capacity of 8 or 10 acres a day. It cuts a 58-inch swath. The complete mower is easy to handle as it can be turned in a 3-foot circle.

The Jacobsen Manufacturing Company designed this mower because they felt the need of a mower to economically maintain lawns of large size. It is particularly adapted for cemetery, park, school and large estate work. The Jacobsen 4-Acre Heavy Duty Mower has sufficient power to push the two extra cutting widths, which mean the additional capacity of mowing is handled at practically no extra cost.

The gang attachment can be easily removed, leaving the mower as it was originally, a 24-inch swath mower. A great feature of the attachment is that it can be raised while mower is moved from place to place.

This special attachment is not an experiment, but a time-tested product of the experienced Jacobsen Power Mower organization. Complete information may be received by writing direct to the Jacobsen Manufacturing Company, Racine, Wisconsin.

Many Clubs Use Hardinge Mower Sharpener

The popularity of the Hardinge Mower Sharpener is proved by the number of prominent golf clubs which have adopted it as regular equipment this past season. Among them are the following:

- Sunset Valley Golf Club, Highland Park, Ill.
- Lake Shore C. C., Glencoe, Ill.
- Westmoor C. C., Roselle, Ill.
- Bocoran Club, Bocoran, Fla.
- C. C. of Virginia, Richmond, Va.
- Brae Burn C. C., West Newton, Mass.
- Woodland Golf Club, Auburndale, Mass.
- Glenview Club, Golf, Ill.

The Hardinge Sharpener is manufactured by Henry H. Doty, Glenview, Ill. It is especially flexible and accurately sharpens the bed knives and reels of all mowers.

A New Company To Handle Seaside Bent

A company known as the Seaside Bent Seed Company, Seattle, has been organized to contract a large part of the crop of State Sealed and Certified Seaside Bent, Agrostis maritima, or, as the Department of Agriculture now calls it, Agrostis palustris.

Distributors for this company will be:
- The J. M. McCullough's Sons Co., 316 Walnut Street, Cincinnati, O.
- The Northwest Seed Company, 1103 Post Street, Seattle, Washington.
- The Western Seed Marketing Co., Salt Lake City, Utah.

Seaside Bent Seed Co., is said to control about ninety-five per cent of the crop of Seaside bent outside of Lyman Carrier's production, which is sold under the trade names of Cocos Bent. Both Seaside and Cocos Bent are of the very highest quality and should not be confused with the uncertified seed which is not passed upon by the State inspectors.

Believe All, Use Little

Continued from page 5
**Free from Weed Seeds and Debris**

For subdrainage, Armco Perforated Iron Pipe is the logical product because of its efficiency and longer life. It has an unequalled record of 24 years' service in the ground. It stands to reason it is more economical. Armco Perforated Iron Pipe is hauled and installed easily - goes just under the surface and is unharmed by rollers or trucks. It cannot break. Freezing does not affect it, for it is flexible.

Scene of the 1929 National Amateur Championship matches at Pebble Beach course, Monterey County, California, is protected by Armco drainage, including this 36-inch stream enclosure of Armco Corrugated Iron Pipe under the 18th green.

**Drainage Headquarters Knows the Solution**

Do you put up with standing water, soggy areas, washouts after rains - for want of a remedy? Drainage Headquarters at Middletown, with 24 years’ experience in correcting and causing the avoidance of drainage troubles, undoubtedly was encountered your identical problem.

The nation-wide organization of Armco engineers has studied and prescribed systems for every kind of nature of terrain throughout the country. Its studies, involving the application of perforated pipe for subdrainage, large and small stream enclosures and large diameter pipe for bridges, are contained in many volumes of facts assembled at Drainage Headquarters.

For subdrainage, Armco Perforated Iron Pipe is the logical product because of its efficiency and longer life. It has an unequalled record of 24 years’ service in the ground. It stands to reason it is more economical. Armco Perforated Iron Pipe is hauled and installed easily - goes just under the surface and is unharmed by rollers or trucks. It cannot break. Freezing does not affect it, for it is flexible.

Submit your drainage “worry” to nearby Armco engineers without obligating yourself in the slightest. Write for their address. Also, ask for valuable data on golf course drainage - free.

Armco culverts and drains are manufactured from the Armco Ingot Iron of The American Rolling Mill Company and always bear its brand.

**A New Cow Manure**

Free from Weed Seeds and Debris

For many years manure has been the standard fairway fertilizer - because it supplies the right kind of plant food for turf in the right proportions. And, it has many advantages for Fall use. Being truly organic, it undergoes transformation in the soil - the nitrogen being converted into nitrates through bacterial action. However, the low temperatures of winter inhibit bacterial activity and thus avoid leaching loss of nitrates by preventing their formation.

**DRICONURE**

This new product - is not just peat moss and manure trash mixed. It is a specially processed kind of manure - peat moss bedding, consistently uniform in quality and contents . . . maintaining an even 2-1-2 count, and dehydrated to strengthen five times.

**Get Down to the Roots and Stay There**

DRICONURE, unlike fresh manure, gets right down to the grass roots and builds up your soil. Fall and Spring rains will pound it down and mix it into the soil. It is prepared for this purpose. May we suggest that you try it and compare results with any other fertilizer on the market. It may not produce the rank, quick growth some of the more highly concentrated chemical fertilizers produce, but it will continue to nourish long after they would have been used up or leached away. Try it on a section and judge for yourself.

Complete information and prices on request

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