September, 1927

we may list the red, scarlet, white and pin as the best. The Norway, sugar and red maples are the only ones of this group worthy of consideration. Our elm selection should be made from either the American or English variety. Both the American and European lindens are desirable trees. The sweet gum and tupelo can also be included in our list.

In some sections of the country where it is exceedingly difficult to get many trees to grow, it is often times necessary to select the poplars, in spite of the fact that they should not be considered in other sections. The mossy cup oak, the hackberry, the honey locust are better trees, but under the adverse conditions, have an exceedingly difficult time growing into desirable specimens.

Why Nursery Trees Are More Resistant

Obtaining the trees for planting is another problem worthy of some serious thought. Many individuals gather trees from the woods because of their cheapness. One usually finds, however, that when cheapness is the only recommendation given for an article, it is often times best to take the more expensive. This applies equally well with trees. The tree from the nursery is almost invariably best because during its growth, it has been prepared for the shock of transplanting. The chances for the nursery trees growing are much better than are the chances for the one taken from the woods. Usually the nursery tree is better shaped and makes a more sightly specimen than does the tree from the woods.

The size of the tree to be transplanted depends almost entirely on the amount of money the individual is willing to invest in the trees. One secures the most for the money expended by purchasing trees that are about two inches in diameter. Such trees are small enough to be readily transplanted and at the same time are large enough to make a worth while showing. Larger trees cost more money, have to be transplanted much more carefully and the chances of failure are increased materially with the added size of the trees.

Proper Preparation Before Planting

When the site for the trees has been selected it is necessary to prepare the ground for receiving the tree. The common practice is to slight the preparation and this only leads to future disappointment. For a two inch tree, a hole should be dug at least three feet square and two feet deep. Three feet deep is even better. Fill the bottom of the hole with rich top soil to within a foot of the top. Have enough additional top soil on hand to fill around the tree when it is put in place. The planter is then ready for the tree.

When a tree is dug special care should be exercised to destroy as few roots as possible. Those which are (Continued on page 41)

Start War on Fall Weeds

By JOSEPH VALENTINE Vice-President, National Association of Greenkeepers of America, Merion Cricket Club, Philadelphia, Pa.

FALL is fast approaching, and with it comes the crab and goose grass, which is commonly known as "fall grass." In fact in many places it has made its usual appearance. This means, fellow greenkeeper, that we must get busy, and combat this dreaded enemy.

Many greenkeepers are doing all they possibly can to eradicate this weed, but there are also many who are practically doing nothing along this line. It is to this class that I want to emphasize the importance of doing away with this menace to our golf courses.

No doubt many have a method of their own in combating this enemy and I feel sure if their particular method is good, they are certain to succeed. But, it is one thing to have a method, and use it, and still another thing to have a method and not use it. When you have decided on a certain line of attack, give it a thorough trial, and you are bound to obtain some results. But on the other hand if you do not give any method a fair trial, how are you to know whether you are right or wrong?

Ammonium Sulphate Excellent Control

For many years our course was covered with crab and

goose grass, and am very glad to state that we have been fortunate enough to reduce it to a minimum. In the first place do not let this grass go to seed. Check its future growth by the spreading of the seeds. Ammonium sulphate has acted as a wonderful check in overcoming this turf condition. We have been using it very freely, and have applied it very frequently, using about an average of 50 lbs. to the acre. When it is raining our men are instructed to don their rain coats, boots, etc., and go and apply a good application of ammonium sulphate, where same may be needed on the fairways, for this is the best time to apply it. When applied dry it should be mixed with top-dressing or sand. The places which need it the most are the poor spots on the fairways, for you know this grass will thrive extensively in these spots. I would not recommend the use of any spreading apparatus in applying this material. Let this be done by hand, and then the men are certain to apply the material where it is most needed. Since carrying on this method, crab and goose grass have been reduced on (Continued on page 33)

the editor takes the liberty of printing this final paragraph without his sanction. It is not written in eulogy, but rather as an expression of gratitude for the privilege of his friendship and his confidence, and to join his hand with those of our members who do not yet know Mr. Morley personally.

Reels and Bed Knives

AIRWAY cutting units, as well as tee and green H mowers, work under difficult and destructive conditions. The cutting edges work down in all kinds of dirt and grit, and yet are supposed to maintain a keen cutting edge and do a nice, clean, smooth job of mowing.

The first thought that comes to an inexperienced operator's mind is that in order to maintain the edge, he must jam the bed knife up against the cutting edge of the reel. This not only destroys the cutting edge, but the rubbing action in connection with the dust mixed with the grass, acts as a grinding compound and causes excessive wear. This quickly reduces the wearing surface of the bed knife and cuts the diameter of the reel down, destroying its efficiency.

Shortly after the reel starts revolving, there is enough heat generated to cause expansion of the reel, which increases the friction or rubbing action on the bed knife. Therefore it is at once seen that a great deal of care must be exercised in making the adjustment of the reel to the bed knife. The reel must not bind even slightly at any point, and cutting units should be inspected frequently to see that the action of the reel is free.

Putting greens are continually top dressed with a mixture of sand and other material, and if this is not first worked down around the grass roots, it will greatly affect the cutting edge of the mower. In examining piles of cuttings near some greens, it has been found that from 20% to 40% of the pile consisted of top dressing which had been picked up by the reels and deposited in the grass catcher box. This not only is ruinous to the putting green mower, but it robs the greens of fertilizer which costs money and labor to spread on the greens.

Start War on Fall Weeds (Continued from page 18)

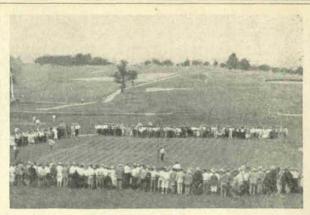
our course to a minimum, and we trust that in a very short time to have it practically eradicated from the course.

In conclusion let me impress upon you that your job is to remove this menace and not to increase its growth, so why not start at the source of all growth, and get these weeds before they go to seed.

Fall Seeding

The fall is without a doubt the best time to do any seeding on a golf course, and this should not be done at any other season of the year. Best results will be obtained if this is done early in the fall. The spring seeding is almost useless on a golf course. In seeding make (Continued on next page)

Say you saw the ad in The National Greenkeeper



The 18th Green at Oakmont Country Club, Oakmont, Pa., where the U. S. G. A. Open Championship was held this year. Grass Seed supplied by the Stumpp & Walter Co. for many years.

For the Most Enduring and Finest Turf Sow BENT GRASSES

Sow Bent on your Fairways and Lawns! The extreme fineness and beauty of turf produced from Bent Seed are well known and its superiority for use on the golf course is recognized, but owing to the high cost of this seed for a number of years its use was restricted to small areas, such as putting greens. Now that the cost is more in line with other grasses, it is practical to sow Bent on your Fairways and Lawns.

Carefully distributed, 100 lbs. of Bent Seed used alone will sow an acre of land. If used in a mixture with other varieties, such as Blue Grass, Red Top and Fescue, we advise that 20% of the mixture should be Bent Seed.

For Early Fall Sowing We Offer

Grass Seed of Known Quality

TESTED for PURITY and GERMINATION

South German Bent Seed. A natural mixture of Bent Grasses, formerly and still known as Creeping Bent. Long recognized as the leading turf pro-ducing Bent. Produces turf of exceedingly fine recture. *Fine Quality*... 10 lbs. \$10.00, 100 lbs. \$75. *Superfine Quality*... 10 lbs. \$12.50, 100 lbs. \$105.

Cocoos Bent Seed. A strain of true stoloniferous (creeping) Bent, pro-ducing splendid turf of pleasing color and hard wearing quality. 10 lbs. \$22.50, 100 lbs. \$200.

Rhode Island Bent Seed. (Washington Grown.) A pure strain of Rhode Island Bent Grass, of strong vitality, producing excellent turf, espe-cially on moist land. 10 lbs. \$15.00, 100 lbs. \$125.

Colonial Bent Seed. Identical as to seed and plant with Rhode Island Bent. We offer seed practically 100% pure. 10 Ibs. \$13.50, 100 Ibs. \$110.

Special Putting Green Bent Formula. Contains a heavy percentage of Bent Seed. Use one and a half pounds to each 100 sq. ft. on new greens, one-quarter to one-half of this quantity for renovating existing turf. *10 lbs.* **\$\$**, 100 lbs. **\$70**.

Bent Stolons. For those who prefer this method of establishing turf we offer Metropolitan and Washington Strains. 100 sq. ft. \$25.

Chewing's N. Z. Fescue. Produces a delightful mat-like turf of pleasing deep green color. Suits almost all soils, especially of sandy nature. We offer true seed of heavy weight, high vitality. Io lbs. \$5.50, 100 lbs. \$45.

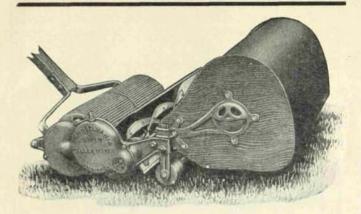
Prices, on larger guantities of the above, or on other turf producing grasses, on request.

Remember:-All our seeds are of the highest quality, obtained direct from the most reliable sources of supply and are botanically true to name. All seeds are new and are cleaned and recleaned until they are brought up to the highest possible state of purity and germination, special care being given to the elimination of weed seeds.

Without obligation we shall be pleased to send a representative who, from long experience, is qualified to advise regarding grasses and furnish such other information at is necessary for the best results.



30-32 Barclay St., New York



Super Rollers Prepared St. Andrews Greens

For Record-breaking Play

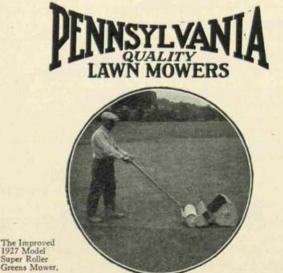
Bobby Jones, himself, admits that superputting was largely responsible for the new world's record he made in winning the 1927 British Open Championship.

However, even for the world's best golfer, super-putting is possible only on flawless greens like those at St. Andrews, whereon both courses—the PENNSYLVANIA Super Roller Mower is standard greens equipment.

Having been still further improved for 1927, the Super Roller is now, indeed, the perfect mower for golf putting greens. It is light-running and easy to push, being pounds lighter than other mowers of its type. It has a 7-blade, high-speed cylinder, Alemite lubrication throughout, and either ball or roller bearings, oil tight and dust proof. It cuts an 18-inch swath and positively will not ridge the greens.

Write for your copy of new GOLF CATALOG, giving complete details of the Super Roller, as well as of the tractor-drawn Super Fairway Quint and the other PENNSYLVANIA Mowers for Golf Courses.

PENNSYLVANIA LAWN MOWER WORKS 1645 North 23rd Street Philadelphia



Start War on Fall Weeds (Continued from page 33)

sure that the seeds will have a chance to germinate; this is accomplished by using a discing harrow, so that the seeds are covered with the soil, and then they will have an opportunity to germinate. When you are re-seeding do not forget to use a good top-dressing when seeding.

Always bear in mind that the best results from seeding are obtained by doing it in early fall. And don't forget that the easiest way to eradicate fall weeds is to get them before they seed.

From Local Viewpoint (Continued from page 28)

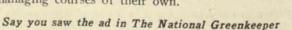
of creeping bent to acid and alkaline soils. Samples pulled from the plot decidedly alkaline showed short runners of excellent color and with unusually short stems between nodules. In comparison, the bent growing in acid soil showed longer runners with finer stem and nodules at least an inch apart. The bent used in these two experiments was from one lot of Washington strain.

Another experimental plot was devoted to Japanese clover, which grows on fine stiff stems about two and a half to three inches high. These sturdy little plants crowd each other so closely that a golf ball will lie on top, giving a very good lie. Further experiments will be made with this clover in an effort to determine its practical value for use on fairways where it is difficult to maintain a good stand of the accepted kinds of fairway grasses.

Dr. Salter assured the assembled group of greenkeepers that the experimental station wishes to assist them in every way possible, and will appreciate receiving inquiries and suggestions that may further their contemplated program of research work in turf maintenance.

One section of the laboratory is now devoted to the investigation of brown-patch, and working along somewhat original theories. The next year's progress of this department will be followed with a great deal of interest, as the control of this disease in the Cleveland district alone runs into a considerable sum of money every year.

The Wooster meeting was voted to be one of the most interesting held this season, and the club was heartily congratulated on the unusually fine condition of its new course. Mr. Parsons was formerly assistant to Frank Ermer, greenkeeper at the Ridgewood Golf Links, which was the scene of the National Amateur Public Links Tournament this year, and his accomplishments at Wooster reflect the fine training he has experienced under Mr. Ermer's direction. Mr. Parson's work is a splendid example of what "brotherhood" means in a local association of greenkeepers, all willing to train and develop their assistants to a point where they are capable of managing courses of their own.



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