

PATENTED

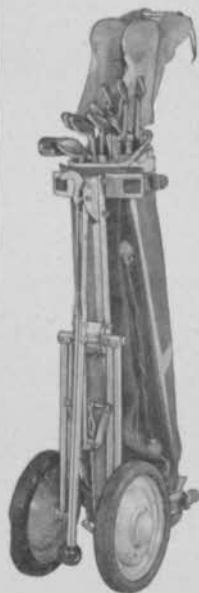
KADDIE KART PRODUCTS

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GOLF CART SUPPLY SERVICE and CHAMBERLIN METAL PRODUCTS
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Ko-lap-si Kart

TRADE MARK



Four New 1949 Models

TYPE T 11
ELEVEN INCH WHEELS
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TWO T-14 — \$39.60

Two T-11 — \$38.10

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1. Drop the handle — it folds.
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3. Steel and aluminum construction.
4. No buttons, rods, legs or arms to push or pull. No thumb screws, wing nuts, ratchets to twist, adjust or keep tight.
5. It stands erect either closed or open. Type T 14 folds to thirteen and a half inches. Type T 11 folds to ten and one quarter inches.
6. Compensated shock-absorbing, with flexible body torsion to eliminate jars and jolts.

— PATENTED —

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11. Never walk in traps.

12. Never move or pick up ball without permission from your player.

"There are a good many, and more complex, rules for caddies," Graham contends, "But caddies either won't read them or they can't understand them. In fact, we're doing pretty well if we can get caddies who are able to read the 12 rules we have posted.

"And we've found that if caddies will abide by the 12 simple rules we have posted, our members are satisfied with the calibre of caddying they get."

Prizes at "Caddy School"

Graham's plan doesn't stop with the posting of the rules, however. He holds a regular caddy school to follow up on the program.

Graham and Donald S. Evans, club president actively supervise the school, which is held on Saturday mornings at about two week intervals, but without advance notice.

Graham turns up for the school with a hatful of paper slips, each bearing the number of one of the 12 rules.

Evans shows up with about \$20 in crisp \$1 bills.

They are told the cash value placed upon the correct answer for any one of the 12 rules. The questions are all of the \$1 and \$2 variety.

Each caddy steps up in turn, draws a number and, if he can rattle off the rule matching the number drawn, he collects his money.

The interest generated by the \$1 bills is surprising. It is almost unbelievable.

Thirty-two caddies, the younger ones, are in the school.

Evans reports club members are "enthusiastic about the school, and the good it has done. Why, the young caddies have improved 100 per cent.

"And what's more important, we seldom have any players griping about their caddies.

"Another thing, too, by having the school on Saturday mornings, on unannounced Saturdays, we find that we are able to have sufficient numbers of caddies on hand to take care of our heavy Saturday play — when our businessman-member comes out to get in his week's round of golf. It's been well worth the small amount of money it's costing us," he added. The Graham plan went a step further. It caused posting of signs in locker rooms asking members to refrain from harsh criticism of caddies, and to make their criticism from a constructive angle.

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"Always Ahead"
 WITH **KROYDON CLUBS**

● "Always Ahead" is more than just a slogan... it's the story of Kroydon Clubs. For Kroydon has been first again and again in golf club design and development... first and *only* manufacturer today making complete golf clubs... first to create individually registered *matched sets*... first to harden soles of irons — *nick-proof* irons are exclusive with Kroydon.

Sell these exclusive Kroydon features

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MAPLEWOOD, NEW JERSEY

● **ANGLE-LOCK SHAFTS FOR WOODS...**
 ● Angle-Lock construction eliminates set screws that cause most cracked hosels and heads. Shaft is firmly anchored to head, cannot possibly turn.



● **RHYTHMIC HY-POWER & HY-TEST SHAFTS...** *Hy-Power steel shaft* for irons... duplicates the shape, feel and action of a hickory shaft.

● *Hy-Test shaft* for woods has graceful taper from grip to club head. Fluted for proper flex... maximum power.



● **MUSCLE-BACK IRONS...** The Kroydon Muscle-Back shape concentrates the greatest thickness and weight directly behind the hitting area... gives more power and distance with least effort. Write for 1949 catalogue and prices.



SURVEY SHOWS PHILA. AREA GETS BETTER TURF BY AERIFYING

By Charles K. Hallowell

Better fairway turf is coming for Philadelphia golfers, according to the statements of the Golf Course Superintendents who are members of the Philadelphia Association. They reported, at a recent meeting held to discuss how and when to use the Aerifier, that this implement was making it possible to do the right maintenance practice at the correct season of the year.

It is the opinion of Joe Tagnon of Ashbourne CC, that the Aerifier is the one machine that has been manufactured in the last thirty years that will do most to help the superintendent produce better turf on fairways, tees, and greens.

Agreement among the Philadelphia group was that fall is the time when Aerifying will give the greatest returns. Limestone, fertilizer, and insecticides to control grub, can be worked into the soil at the place desired with the Aerifier, which heretofore has been impossible.

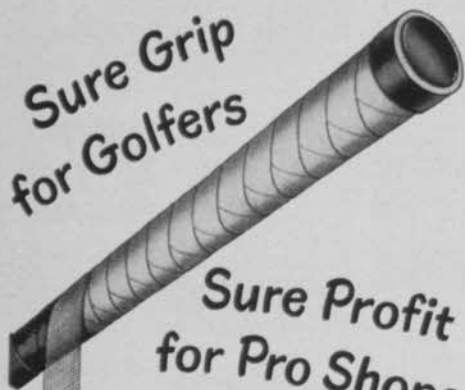
September and October are the months when the Aerifier is used on all turf on all courses, but a number of

the superintendents reported using the Aerifier in the early spring when turf was below par. Reports were given that April aerifying had encouraged better root growth, resulting in a denser turf throughout the summer. May 15th to August 15th is the period during the growing season when the Aerifier is seldom used. For a compact soil or areas where there is a layer of undecomposed organic matter, several operations of the Aerifier corrects the trouble. After aerifying such areas, both the plants and soil use rainfall and artificial water more efficiently.

When renovating fairways to change the species of grass such as Blue Grass to Bent, or when increasing the Bent population, 12% of the Superintendents reported Aerifying to be a must. After using it at least twice, and several reported three times, there was sufficient loose soil to enable the seed to get a good start.

The summary showed all agree the breaking up cores of soil either immediately or within a few hours after aerifying, is essential. The opportunity of getting the fine soil mixed with existing grass plants is lost if the cores become hardened. In that unbroken condition, the cores are ob-

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This summer you'll sell more Gauztex than ever before. Prominent Sports Tin ads are reaching millions in the Saturday Evening Post and Golfing. And, of course, that's in addition to the regular Gauztex year-round campaign.

Gauztex now pays you bigger dollar profit ... and the new Sports Tin display adds a powerful plus in sales appeal. Get your share of Gauztex profits!

Order the Sports Tin from your wholesaler today!

Order the attractive counter display carton today!



**GENERAL BANDAGES, INC.
Chicago 5**

jectionable to the golfers. Steel mats and pieces of cyclone fence are mostly used after the Aerifier. There were reports that the chain harrow was an ideal core breaking-up tool.

Any complete renovation program is concluded by mowing and rolling. A few of the men reported watering as the final procedure in the renovation program.

The rate of speed to pull the Aerifier was agreed by all to be five to seven miles per hour.

A number of greens have been aerified to loosen the soil and increase the moisture-holding capacity of the soil. When using the Aerifier on a green, all agreed it was important to complete the operations in one day. Two or three men can aerify, fertilize, topdress, and produce a finished putting surface on one green, within five to six hours.

The men in the Philadelphia area enjoyed trading their experiences with this new tool. They asked Charles K. Hallowell, their county agent, to summarize their different findings. Copies of the summary are now available from Robert F. Pollock, Secretary, 39 Columbus Avenue, Haverstown, Pa.

HOW TO BEAT THE BUDGET

Since 1939 there has been a steady increase in production costs which goes something like this:

Labor up 156%. Fertilizer up 15%. Supplies up 29%. Equipment up 30%.

From 50 to 80% of every golf course maintenance budget goes for labor so the big problem is to reduce the man hours of labor without lowering the standards of maintenance. Here are some suggestions that will help:

1. Substitute (profitably) mechanical power for man power wherever possible.

2. Minimize time used for moving from place to place. Schedule work assignments for each man so second job starts where first one ends.

3. Replace old obsolete equipment with new modern more efficient equipment. Keep machinery in first class working condition.

4. Train men to accomplish the greatest amount of work with the least amount of energy.



Record group of over 300 attending the Midwest Turf Conference at Purdue Univ., March 7 to 9, made it necessary to offer course in sections so rotation of groups would permit those present to attend all lectures.

Purdue Host to Record Midwest Conference

This year's turf conference at Purdue U., Lafayette, Ind., March 7-9, topped all previous records for attendance with registration well over 300. Because of the large attendance, lectures were sectionalized for group rotation. Dr. O. J. Noer led off Sect. I with a talk on turf fertilizing. Suggesting that faulty drainage on a wrong grass strain, rather than fertilizer or fertilizing sched-

ules, may be causing some problems, Noer advised both spring and fall feeding but lighter applications through the summer to lessen brownpatch. The continued use of 2, 4-D, without fertilizing, he said, may introduce a clover problem.

Dr. H. B. Siems, Swift & Co., Chicago, said that allocations to war-torn nations were responsible for the continuing shortage of nitrogen, although the potash and phosphate supply were improving.

Dr. G. N. Hoffer and Howard Lathrope conducted a tissue testing demonstration.



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- Ball Bearings
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—need no inflation
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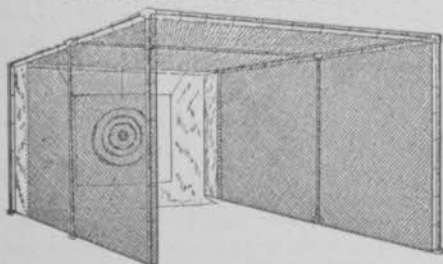
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a Sweet Swing*

Ederer golf nets at the first tee, for warm-up, practice and instruction, improve play and increase player enthusiasm. You'll find them busy from dawn to dusk at clubs everywhere.

EDERER "INVINCIBLE"



Golf's standard full size golf net for indoor instruction and practice. Hundreds of clubs and pros have found the "Invincible" one of their most popular and profitable features in developing better and happier players.

EDERER "PORTABLE"



This is the new portable net that has won such wide popularity for its easy adaptability for practice in limited space, 6½ ft. high with 10 ft. wing spread — handles full range of golf practice shots. Folds into a compact unit 3 ft. x 6½ ft. x 5 in. Weighs only 23 lbs with its target backdrop.

Write for folder and price list

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Invincible Sports Nets

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They pointed out that the concept of determining whether or not the grass needs fertilizer is based upon the content of the leaves of the growing grass. Liquids compressed from grasses under test will react with the testing material to show if the fertilizer used is a balanced one for that soil. Dr. Hoffer displayed slide samples of crops which demonstrated various nutritional deficiencies. Demonstrations were given of soils and tissue testing.

George Spencer, Purdue ag. eng. dept., lectured in Section 2 on surveying for laying out turf areas. The theme of his talk was that anyone can survey ground in order to lay out positions of tile, drainage ditches and distances from tee to green. Spencer demonstrated simple methods that can be used in determining horizontal and vertical distances applied to contours and grades.

Simple instruments were used during the demonstration. Spencer showed how a carpenter's level can be fitted with an attachment so that a greenkeeper can determine slope gradients.

He explained why certain surveying operations are performed on a golf course, and showed how to determine the area of a golf green; important to know when it must be fertilized at a certain rate per thousand square feet.

Section 3, machinery session, was given by experts of three turf machinery companies: Thorbald Mortensen, Jacobsen Mfg. Co.; W. H. Brinkworth and M. R. (Scotty) McClaren, Toro Mfg. Co., and G. P. Carson, Worthington Mower Co.

In Section 4, Willis Skrdla disclosed that there are some 55 diseases of turf, only 6 of these are important to turf growers. Of the 6, Dollar Spot and Brown Patch are the most important. Skrdla announced that fungicides are to be tested in a coordinated program on a national scale. Comparative trials eventually will be conducted at 14 different stations throughout the country, when the program is fully under way.

Dr. Gerald O. Mott talked on soil structure, using apparatus demonstrating how water drains from soils. As the depth of soil on a green increases, the percent of moisture at the green's surface decreases, Dr. Mott said. A layer of sand in the soil of a green breaks up the capillary action of the water, and the green doesn't drain. The saturated soil above the layer of sand drowns the bentgrass roots, so they do not

penetrate below the sand layer. This causes dry greens in hot weather and saturated greens shortly after rain. The closer the layer of sand to the green's surface, the more often the green must be watered, because little of the water below the sand layer can be used by the plants.

Dr. Fred V. Grau discussed problems of soil aeration and compaction. Relief from compaction may be obtained by adding proper fertilizers to the soil producing the turf. Approved machinery and establishment of selected species of turf grasses will also help remedy compacted condition.

He also informed the section that knotweed and goose grass will indicate compaction of a soil; both grow where ground is so packed that no other grass will show.

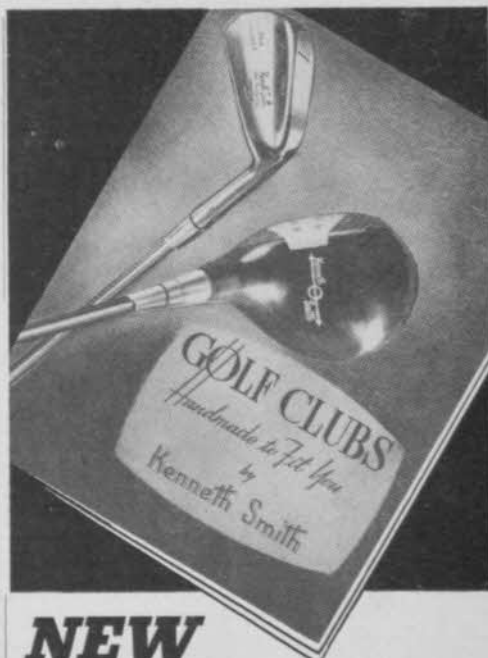
During Dr. Grau's slide display, he told the class that, "You must make turf look worse before you can make it look better!" This was during the showing of a turf subsoil tiller and its effects on the looks of the turf immediately after it had done its job. He predicted that tried and proved mixtures of warm and cool season grasses will be available some day. Grau, who rang down the curtain on this year's Midwest Regional Turf Foundation Conference, said he believed new golf courses will continue to be built so that they can be maintained to the utmost with machinery. "The trend is to use more machines and fewer men," Grau concluded.

New York State Pros Hear Jones at Syracuse Clinic

Ernest Jones, making his first appearance at a pro clinic, drew 125 Central and Western New York pros to the Central New York PGA's business clinic and spring meeting at Hotel Syracuse, Syracuse, N. Y. March 27-28. The noted teacher of the swing principle was kept busy for 20 hours in day and evening sessions presenting and explaining the ideas that have made him an outstanding teacher and on the basis of demand for his services and lessons given, the most successful golf teacher.

Phases of the transition in the business of golf that pros must watch and bring to attention of their officials were set forth by Herb Graffis, GOLFDOM editor.

Resolutions adopted by the Central New York section included one to limit tenure of office of national PGA president to one three-year term and another to have PGA



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You can now provide your members with the best
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FLEXISOLES are custom made of selected first quality U. S. KOYLON foam to insure proper resiliency, buoyant support and long wear. GILON, the elastic leather type coating, an AIR WALK development, further provides soft, luxurious foot comfort.

Attractive package in two color sports design.

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executive sec'y. notified of sectional nominations for national PGA offices 30 days in advance of the PGA annual meeting, the executive sec'y. in turn to notify all sections of all candidates so delegates can go to the annual meeting instructed by section members. Purpose of the latter resolution, as brought out in comment at Central NY PGA meeting, is to allow the association's annual meeting to concentrate on business matters advancing pro golf rather than devote undue amount of time to politics.

Old Orchard Bent Award To Greenkeeper Assns.

Each year Ralph Bond, Old Orchard Turf Nurseries, donates 5,000 sq. ft. of Old Orchard C52 to Minn. Greenkeepers Assn., to the Midwest Regional Turf Foundation sponsored by Midwest Greenkeepers Assn., and to the Iowa Greenkeepers Assn. to be auctioned off to highest bidder, among members. The proceeds go to the associations. This year Art Jensen, Fargo (N.D.) CC bid in Minnesota's bent: Midwest bid in their own allotment while Iowa will ask for bids on their 5,000 sq. ft. by letter later in the season.

VETERAN'S BENEFIT

(Continued from page 61)

Frank Strafaci of Pomonok, Tom Strafaci of Plandome, Ralph Strafaci of Hempstead, Ray Torgerson of Cherry Valley, Phil Weinsier of Fresh Meadow and Dr. Wibell of Cherry Valley.

In addition to Mrs. Balding, the women players at Fresh Meadow included Mrs. Stephen Wise of Piping Rock, Mrs. Saul Weinsier of Fresh Meadow, Mrs. Leon Weill of Inwood, Mrs. Torgerson, Mrs. F. K. Thayer of Piping Rock, Mrs. Rudolph Stutzmann of Oakland, Miss Roslyn Swift of Glen Oaks, Mrs. Carl Sayre of Creek, Miss Isabelle Robertson of Meadow Brook, Mrs. Edward G. Richmond of Cherry Valley, Mrs. Thomas Morgan of Garden City CC, Mrs. Fred Meissner of Pomonok, Mrs. Harry McNaughton of North Hempstead, Mrs. Ruth May of Inwood, Miss Peggy Mackie of Wheatley Hills, Mrs. William R. Kirkland of Piping Rock, Mrs. L. V. O. Hommel of North Hempstead, Mrs. Longstreet Hinton of Piping Rock, Mrs. Bernard Freeman of Inwood, Mrs. Charles Carbone of

Hempstead, Mrs. George H. Bostwick of Meadow Brook, Mrs. Al Baar of Fresh Meadow, Mrs. Arthur K. Atkinson of Green and Mrs. Lucy Armstrong of Creek.

While strolling out of Garden City Hotel, Frank Strafaci, five-time Metropolitan amateur champion and one of the great shot-makers of the country, remarked, "Golf is doing something really worth while in these parts and I would like to see golfers in other parts of the country take time out to remember a lot of kids were wounded and would like to putt or pitch at rehabilitation centers as they strive to regain health."

That was the sentiment of a lad who did a lot of island hopping in the Pacific with General Douglas Mac Arthur during the late war. A lot of his buddies were wounded and as Frank says "we can't do too much for them."

HOW SOIL STRUCTURE HELPS

(Continued from page 57)

ing down the plasticity of a soil. But if there is too high a percentage of organic matter the soil will be spongy and it will

be impossible to maintain a true firm putting surface. Also, although peats will take a lot of water, they will likewise hold water in the cells which the grass roots can't get, in which case even though the peaty soil seems moist the grass may wilt for lack of moisture. Too much organic matter in our putting green soils, therefore, is not good.

Test Soils and Mixtures

Here is a good way to test soils and soil mixtures, both for building the surface on a green and as a mixture for top dressing. Use the soil that you have available as the base or bulk of all mixtures you will make. Possibly you have a bed you're cultivating to get rid of weeds. Sift this soil and then set aside one sample of the pure soil. Then to another sifted sample add about 1/8 by volume of good sedge, reed, or woody peat. German moss peat isn't fine enough unless you can grind it up some way. To another sample of soil add 1/8 of peat and 1/8 of coarse, clean sand. To another one add 1/8 peat and 1/4 of sand and to another one 1/4 of peat and 1/4 of sand. That's five samples. If you need any further, leave the peat at 1/4 and increase the sand.

Pros., Managers...Here's a Fast Profit Item!

"SPORTS-CLOTH"

**A HANDY, HAND TOWEL
EVERY GOLFER NEEDS**

**SNAPS
ON BELT
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- Keeps Hands, Clubs, Ball Dry and Clean
- Always On Hand—Ready for use
- Sells and Resells—Fast!
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**RETAIL PRICE
3 for \$1.00**

**YOUR PROFIT
\$1.75 on every
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Send me _____ dozen Sports-Cloths (Packed 3
Send me more information () _____ per Pack)
Price \$2.25 per dozen.

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Thinner cover } MORE
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WILL NOT TURN BY THE THREADS

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Each sample should be 2 or 3 quarts in volume.

Put a sample in the bottom of a bucket, pour water in, stirring it until you get it to a consistency just short of where it will pour. A more exact check is to thin it to the point where you can draw your finger through the top of the mud and that impression will still remain there until you tap the pail on the floor two or three times, when the surface will slick over again. Towards the end add water sparingly because the consistency will change very quickly. Do the same with each mixture and trowel each sample into a cigar box or some other container of at least 1 1/4 inches in depth. Make a record of the mixture in each sample and leave them for four or five days on the rafters or someplace in your shop where it is pretty dry and where they will dry uniformly. After the samples are dry, test them. You will probably find the pure soil, and perhaps one or more of the other mixtures, has dried so hard that you can't crush or crumble it in your hand.

In order to have some uniformity in testing the force it takes to crumble them use the same method on each. My experience in testing hundreds of samples has proven to my satisfaction that when you can't crumble a sample of 1 1/4 inches in thickness between the thumb and fingers of one hand, the mixture is too plastic for a green. So, test each dried sample in that manner and if you can break the sample of pure soil it's an exception, and you can use it. But, if not, continue from the mixture with the least peat and sand added, to the ones with more added, until you get one that crumples as described, and that's a safe mixture.

Avoid Soil Layers

Remember, you cannot correct poor soil structure by putting on a layer of this and that, because layers stop capillary movement of water and the roots simply come down to the layer and stop. You can demonstrate that easily by putting, say, 6" of a sifted silt or clay soil in the bottom of a tube and then add a little sand or peat, say 1/4" thick, and put some more soil on top of that; then stand the tube in a jar of water. After a few hours the water will come right up to the sand or peat and stop there. Of course, if you have the layer too close to the water, the water will force its way