added cost with no interference from play three hours each morning.

In topdressing greens the entire time is not spent actually on the green, as a considerable percentage of the time is spent mixing and hauling material, although the added cost is considerable, plus the inconvenience to the players.

In mowing green mounds, the type of course has an important bearing on the increase in cost. On the Banff course a considerable portion of the work has no lost time, as the workman is out of the line of play and has very little interference from the players.

Mowing approaches give a greater percentage of lost time than most major operations, since the workman has to stand aside during some fairway shots, all approach shots and all putts, plus part of the time players are walking from their approach shots to the green.

In raking bunkers the actual unproductive time is very little, but the increase in cost that play creates is very high, although fortunately for the greenkeeper there is a fluctuation in the standard of condition. As indicated on the chart, there are times when the condition of the traps will be a great deal lower than others.

The added cost in changing holes due to volume traffic is also very high.

The benefit of working out such operations as indicated on this chart is shown by the heavy line running diagonally from 70 vertically to 187 horizontally, which is worked out on the principle that I operate my course with an expenditure equal to



CHARLES ERICKSON
2816 Colfax Ave., South, Minneapolis, Minnesota

the actual cost of maintaining the course without players plus a 25 per cent margin of safety, (dotted line) which takes care of the added cost created by play. With 100 players per day I have the difference between 25 and 67 or 42 per cent of my budget for that day which I can save or play around with as I see fit. When play increases to 117 I only have 17 per cent with which to make improvements. With 137 players I have 9 per cent not required to actually operate with. When the play reaches 140 I am operating to the full capacity of my budget. With 150 players I am operating 8 per cent above my expenditure allowance in order to hold the course at the present standard. With 167 players I am still only operating 9 per cent beyond my budget. When play reaches 184 I am operating 25 per cent above my allowance, or there is 25 per cent of the work not being done.

This data should interest every greenkeeper, pro-greenkeeper, green-chairman, or anyone interested in club finances or course condition, and when worked out will prove very beneficial on any course regardless of its location, condition or class.

# ARMOUR TO DESIGN CLUBS FOR MacGREGOR

Dayton, Ohio—It takes two people to produce a contract and usually they both agree to do certain things. In this recent



Tom Armour signs with Crawford-McGregor & Canby, while Ed Canby II, v-p and adv. mgr., and H. B. Canby, pres. look on.

merger of ideas and craftsmanship just this sort of a contract was drawn up and signed.

It appears that Tommy Armour, the undisputed maestro of iron play, agreed as party of the first part, to actually design a new line of golf clubs which would embody all the secrets which brought him fame. The other signer, H. B. Canby,

president of The Crawford, McGregor & Canby Co., agreed to produce the identical clubs which Tommy Armour designed.

There's only one string attached to this new line of clubs—they will be sold only through golf pros. This, for the obvious reason that a golf pro is about the only man who can give the rank and file the exact clubs which will enable the latter to go out into the fairways and sandtraps and execute better shots.

Every golfer is aware of the fact that Tommy Armour knows golf clubs, especially irons—and every golfer knows that the MacGregor people know how to build them. So the only question right now is when will the golfer be able to get a set of these clubs and do a bit of preliminary waggling and swinging. To this question the MacGregor company answers: In plenty of time for play when the 1935 season opens. Tommy's work at the factory on the designing end is finished and the skilled craftsmen are already at work turning out the clubs.

# PENFOLD INTRODUCES NEW PROCESS COVERS ON 1935 BALLS

New York City.—Florida and Georgia pros will now be able to get immediate deliveries of Penfold balls from headquarters established in the Withers Warehouses, 1000 N. E. First ave., Miama. R. Van Buskirk is in charge. Bruce Murdock will call on the pros.

Penfold introduced his new liquid Penfold "75" and Penfold "35", January 1st. Both of these balls have the new "chemoweld" cover, Penfold's newest development. This new cover process, which is entirely chemical (instead of with tension-wilting heat) makes it possible to produce the first truly tough, thin-covered ball, says the maker.

### JOHN BROPHY HAS PROFIT TIP FOR PROS

Miami Beach, Fla.—John Brophy, veteran pro of Bay Shore and Hither Hills, is tipping off the pros to some spring business that John knows will make them money because he has worked it very profitably himself.

John invented the Korrektor grip that Hillerich and Bradsby, 434 Finzer st., Louisville, Ky., is supply to the pros trade. The grip, John maintains, sets the clubhead the correct way, keeps the club from turning in the hand, helps the left hand guide the club, makes the player grip with the fingers, promotes an easy swing and keeps the hands from blistering.

The grip can be applied to any club at the usual charge of \$1 each for the grips when the old leather is used and \$1.50 when new leather is used. At this price the pro gets a fine profit. Brophy himself



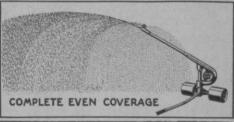
# Kain King The Best Sprinkler Made

Throws more water

1600 gallons per hour at 60 pounds—20% more than other sprinklers by actual test. Two interchangeable, new, patented 3-jet nozzles for all pressures above 30 pounds. Special nozzle available for very low pressures.

### Throws Water Farther

No obstructions to hinder free passage of water. Perfect distribution of water over any circle up to 150 feet.





Instantly set to turn at any speed desired—even as slow as 30 revolutions per hour. Oversize phosphor bronze bearings. Unbreakable. Good looking, PRICED RIGHT. Write for complete information on this new, improved Model E Rain King and Quick Coupling Valves.

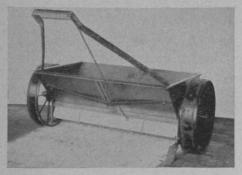
MADE AND GUARANTEED BY

### CHICAGO FLEXIBLE SHAFT CO.

5515 Roosevelt Road, Chicago 45 Years Making Quality Products

SEE US AT THE CONVENTION

### ROOT ALL PURPOSE SPREADER



CUT your LABOR COST with this machine. For speed, economy and perfect application it is unexcelled.

Manufactured by

THE ROOT MANUFACTURING COMPANY
1051 POWER AVE., CLEVELAND, OHIO

# GOLF BALL WASHER IN 5 COLORS

G. B. LEWIS COMPANY DEPT. GD 135 WATERTOWN, WIS.



# Ready! V-8

#### Golf Tractor

Don't decide on any golf course tractor until you find out about this sensational new STAUDE general utility tractor. See your local Ford dealer or write for full information.

E. G. STAUDE Mak-A-Tractor Co.

(Since 1916) 2696 University Ave. St. Paul, Minn.

### BENT GRASS

BOTH SOD AND STOLONS

Vigorous, healthy stock that develops fine, true putting surfaces. Write for full information.

### HIRAM F. GODWIN

Box A, Redford Sta., Detroit, Mich. R. F. D. No. 3, Pottstown, Pa. has sold as many as 400 of these grips in two weeks' time.

Where the grip business turns out great for the pros, John says, is in the spring, just before the start of the season. Most pros send out letters to their members putting in a bid for pre-season repair business, club-cleaning and a general invitation for business and friendship. Brophy's idea is that the fellows, by suggesting some specific and practical innovation, will make more impression with the members and get more business than just a general appeal. He figures that with the reception and performance of the Korrektor grip the pros can really bust into some substantial profits before the playing season actually opens and then follow-up with Korrektor grip sales when the early users start bragging.

He has some grand testimonials from prominent men who are using the Korrektor grip. Lou Wasey, the big shot advertising man, wrote John: "Your grip is great for your golf ball sales. I now hit balls so far into the rough I lose them."

# DETROIT HARVESTER TAKES OVER RAWLS SCYTHE

Detroit, Mich.—Manufacture and sale of the Rawls motor scythe has been taken over by Detroit Harvester Co., and will henceforth be known as the Detroit motor scythe, according to Mr. C. A. Haefner, sales manager for the company. This scythe has a welded and riveted

This scythe has a welded and riveted pressed steel frame that supports a sturdy, one-cylinder gasoline motor, which in turn, propels a 36-inch sickle. The machine is mounted on a ball bearing equipped 30-inch wheel having a farm type, 3-inch concave tread. It is equipped with two handles that enable the operator to pivot the machine sharply in any desired direction or tilt the machine (similar to a wheel barrow) for cutting up or down slopes and for raising over obstructions.

According to Mr. Haefner, the 36-inch sickle of this scythe is applicable to all kind of weed and grass mowing and will



enable one operator to equal, in results, the work of four or more men with hand scythes. It can be readily operated on jobs that are impossible for larger mowing machines and is ideal for trimming around greens, fences, traps, bunkers and clubhouse shrubbery.

Descriptive literature and prices may be had by writing the above company.

#### NEW 1935 WALTER HAGEN THE CLUB LINE

Detroit, Mich.—For 1935, the L. A. Young Golf Co., manufacturers of Walter Hagen golf products, is proudest of its "Hagen Deflector Sole" irons. E. E. Chapman, vice-pres. and gen. mgr., tells us the deflector sole will make its appearance on four new irons in the Hagen linethe International Honey Boy and the Sincroflex, both with stainless steel heads and retailing at \$8.00, and the Honey Boy and the Honeyflex, both with chromium finished heads and retailing at \$5.50.

Chapman describes the deflector sole as follows: "In the deflector sole the back edge is lower than the front, causing the iron to slide or skid over the turf, without unnecessary digging or resistance to the stroke. Elevation from the ground of the front edge is graduated from driving iron to niblick, imparting a natural backspin on all shots with approach irons. It gives in effect, 16 times greater chance for a perfect shot, due to the fact that with the deflector sole iron, you can hit as much as one inch back of the ball, and by its action of sliding or skidding on the ground the club will still make contact with the ball at exactly the proper point."

Another new iron in the Hagen line is the "Sir Walter" with "Power Back" head and flex shaft, to retail at \$4.50. Four new woods come into the 1935 Hagen set-up-the Sincroflex and Honey Boy at \$10.00 each, the Honeyflex at \$9.00, and

the Sir Walter at \$6.00.

A general utility club, known as the Baffie also makes its appearance in the Hagen line. The baffie finds its place with players who have difficulty in playing their

That Happy Combination of Quality and Economy is offered in our

New Broadmoor One-Color

# core Card

Produced by a New Process, its price is \$21 for 5,000. The card, fully complete and comprehensive, is not small and the stock is heavy.

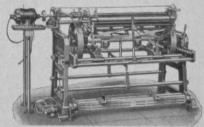
Samples to clubs on request

IOHN H. VESTAL CO., Printers 703 South La Salle Street - - - Chicago

# GREENKEEPERS ATTENTION!

For beautiful greens, keep your mowing equipment sharp on the Peerless Sharpener. Fast and accurate. Simple to operate. Sharpens all types of power and hand mowers. Grinds blades up to wide. Reconditioner for "lapping in." Low in price. Send for illustrated bulletin.

# PEERLESS MOWER SHARPENER



THE FATE-ROOT-HEATH COMPANY 835 BELL STREET - : -PLYMOUTH, OHIO

# R. H. Wheels are stronger!



Rims do not bend—50% better rounded edges — easier steering. used for replacing old, injurious wheels. Sold in singles, pairs or full sets. traction Hundreds

### H. Tractor Wheel SPUDS

quickest to put on or take off. Increase trac-tor efficiency and culti-vate turf... that's why more than half the U.S. and Canadian clubs use them. Durable and low priced. All sizes for all priced. All sizes for all purposes.

Sample spud and circular on request; advise make of tractor and pur-pose for which intended.

Immediate Shipment If your Ford or equip-ment dealer cannot sup-ply, write direct to

R. S. HORNER Geneva, Ohio



## CUT YOUR 1935 MOWING BUDGET!

Divert some of your usual mowing budget to other needs—by using the BUDD 4-EDGE BLADE. Saves time, saves labor, saves frequent sharpening expense and costly lay-ups. Try it first on just one unit—then when you're convinced, equip all your mowers with BUDD. Write for details.

BUDD MFG. CO., Dept. G, Ravenna, Ohio



wood clubs out of bad lies or from the rough. The baffie is an excellent distance getter also on holes where the No. 1 Iron would ordinarily be played. The head of the baffie is of bright finished aluminum

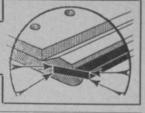
with a loft about that of the Spoon, while shafts are chrome plated True Temper. "All in all," says Chapman, "the Hagen Line for 1935 is the most complete and all-inclusive we have ever presented to the golfing public. We are looking forward to an excellent years, and certainly the professional or dealer handling the Hagen line has a lay-out with which he should be able to show a fine profit. Our factory went on a full 100% production basis as of December 1, and will continue on that basis throughout the coming season. Advance orders received for spring delivery are considerably ahead of 1934."

### MAISACK INVENTS TRAP-RAKE TO FIT GOLF BAG

Green Bay, Wis .- Merrill S. Maisack. pro-architect at the Oneida Golf and Riding club, has put on the market a small folding rake that can be carried in the golf bag and used by the caddie to smooth out the sand in traps after his player has made a shot. The head of the rake is hinged to fold back along the handle when not in use. The entire implement is wellfinished wood.

Maisack's idea is to sell these rakes to the clubs, with club name imprinted thereon. The club will give a rake to each caddie as he goes out. The boy returns the rake to the caddie master upon his return. With a rake handy at all times, caddies

PHOENIX  $RED\ TIP$ TRACTOR SPUDS Extra Long Service Made of a special analysis steel, hardened by the latest scientific heat treating methods. Sizes from % in. to % in. Also Mower Spuds. Inquiries invited. PHOENIX MANUFACTURING COMPANY Joliet, III. Catasaugua, Pa



will have little excuse for not keeping their players' damage to traps well erased. It is estimated that an investment of under \$50 will equip even the most briskly patronized 18-hole layout so its trap maintenance problem will be solved.

### TOMMY ARMOUR FEATURED IN 1935 WORTHINGTON LINE

Elyria, Ohio-Tommy Armour, that grand master of iron play, will be prominently featured by Worthington Ball Co. in the extensive promotion and consumer advertising of their 1935 line of Tommy Armour golf balls. Armour, himself, has recently adopted for his own use in all of his tournaments and everyday play, the Tommy Armour Special—a ball developed by Worthington during the past several months to conform with certain specifica-tions of performance which Armour es-tablished last spring.

This 75c ball possesses several new features of construction, as announced by Worthington early last fall and has met with an immense amount of popularity on the part of players since this introduction, say the makers. It is featured by a patented hydraulic center, resulting in a higher degree of compression than liquid center balls of other types; a new type of winding in which this center is held in perfect spherical form as revealed by the X-ray, and a new cover, developed after many months of research in chemical laboratories, which Worthington advises excels in toughness without sacrificing click or distance.

The Worthington Tommy Armour, retailing at 50c each, which in the past year accounted for a lion's share of all the standard brand balls of this price sold to the consumer, has been improved for 1935. Armour himself recommends this ball for the average golfer whose regular score falls above 85. The 1935 Tommy

SAVE for your club by purchasing acclimated, winter-hardy

## BENT GRASS SEED

Direct from the farms where it is grown. A. N. PECKHAM, Kingston, R. I.

15 Years' Satisfactory Service Also Fairway Mixtures

Armour at 50c is featured by a more durable cover, a patented center and "balanced construction", which results in greater economy and more satisfactory results for the class of players for whose use it is intended.

Worthington announces that these two outstanding golf balls will be backed up in 1935 by an extensive line of trade journal, display and consumer publication advertising intended to bring their merits strongly to the attention of the entire golf ball trade.

### Billiard Manual Offered

POCKET-SIZE edition of "Complete Fundamentals of Billiards" for 25c is advertised by the National Billiard Assn., 623 S. Wabash Ave., Chicago.

The idea, of course, is to promote billiards and it may have a hunch in it for the golf field when a broad and energetic campaign of golf promotion is organized.

## Classified Ads

### Rates: 10 cents a word per issue. Minimum charge \$2.50

An advertisement in GOLFDOM saves the club officials time and money by getting responses from the best men available. The club department heads who advertise for positions in GOLFDOM obviously identify themselves as men who go after their problems in the right way. They are good men for you to give preference.

College graduate, thirty years old, married. Nine years experience as pro-greenkeeper. Invites thorough investigation of present and past record. Wi make change if club managership, pro-green keeping or pro job is available in a good club. Address: Ad 7003, % Golfdom, Chicago.

Pro-Greenkeeper wishes to make change for 1985. With present club 10 years. Has record for keeping courses in fine condition at minimum cost. Good player, instructor, and clubmaker. Address: Ad 7000, % Golfdom, Chicago.

Pro-Greenkeeper with best references desires connection. Expert player and teacher. Thorough knowledge of golf course maintenance and construcknowledge of golf course maintenance and construction. Father and brother both successful pro-green-keepers. Address: Ad 7002, % Golfdom, Chicago.

Professional, 12 years' experience, age 29, married, desires change. Hard worker, having reputation excellent instructor, business ability. Consider assistant large club. Go anywhere. Best references. Address: Ad 7001, % Golfdom, Chicago.

For Sale—Sporty nine hole golf course, complete, clubhouse and Pro shop, new and needed tools.

clubhouse and Pro shop, new and needed tools. Located ten miles from center of Rochester, New York. Will furnish good leads. Can be bought for twelve thousand dollars. Capital worth of this property as recorded in last Federal Corporation Tax Return is twenty-six thousand dollars. Address: Edwin W. Oviatt, 224 Susquehanna Road. Rochester.

Stewardess and professional or stewardess or professional desires position. Both can furnish excellent references. Both well qualified for work. Will accept position combined or separately. Address: Ad 333, % Golfdom, Chicago.

Professional or teaching assistant-23 years old; 6 years experience. Excellent instructor and player. Competent and reliable. Ready to take complete charge of pro department and assist other departments. Highest references. Address: Ad 7004, % Golfdom, Chicago.

Position desired by first class professional. Can furnish best of references; have had years experience. Class A member of PGA. National reputation as teacher. Address: Ad 7005, % Golfdom, Chicago. Scotch born Pro-Desires position either as Professional or as an assistant. 15 years' experience; excellent teacher, player and clubmaker. Address: AD 7012, % Golfdom, Chicago.

Nationally known golf teacher will be open for position as golf professional after February 15th. Address: Box 352, Santa Monica, California.

Pro-greenkeeper-Wife-cateress-hostess, desire position. Highly recommended and unusually competent. Real club builders at a most reasonable figure. Address: Ad 7014, % Golfdom, Chicago. Young, well informed professional desires club where dependable service is rewarded by moderate income. Has clean impressive record of accomplishment. Thoroughly competent to assume full charge of responsibilities. Good teacher, player and business man, Commercial associations that assure quick economic trade service. Salary secondary to opportunity, Your inquiry welcomed. Address: Ad 7007, % Golfdom, Chicago.

Manager-With unusual record of achievement in Manager—With unusual record of achievement in membership building, efficient clubhouse operations and general management, would like to discuss his plan with interested club officials. Recently completed highly successful job for eastern club where greens fees exceeded \$15,000 and house operations showed 15% profit. Compensation depends on my ability to produce. Kindly address: Ad 7008, % Golfdom, Chicago, Ill.

Pro-Greenkeeper, age 38 with twenty years experience open for position, first class greenkeeper, highly qualified instructor, good player. A man who gets results, not afraid to stay home and serve his members, expert tournament conductor, capable; doing necessary construction or rebuilding to the state of the state doing necessary construction or rebuilding; expert on fungus diseases; moderate salary; A-1 references furnished. Address: Ad 7009, % Golfdom, Chicago, Ill.

Greenkeeper with fourteen years' experience on the finest private and daily fee courses in the mid-dle west desires to relocate. Thoroughly experienced in construction and maintenance of country club grounds including golf, polo, tennis, swimming pool, flower gardens and skeet fields. Clean past record with the finest nationally known references. Address replies to: Ad 7010, % Golfdom, Chicago.

Greenkeeper—Freemason, desires position. Single, Locate anywhere. Exceptional experience construc-Ad 7006. % Golfdom, Chicago.

Manager or General Manager—Experienced in

club management, construction and maintenance, desires position. Address: Ad 7011, % Golfdom, Chicago.

Greenkeeper-With 18 years' working experienced in all phases of course maintenance, construction and remodeling, is ready to start work for club needing a man who knows what to do and how to needing a man who knows what to do and now to do it, right, quick and cheap. Experience includes supervisory work under late architects J. Raynor and C. H. Banks. Officials interested please write: Ad 7013, % Golfdom, Chicago.

Greenkeeper-18 years' experience construction grasses, fertilization and equipment, desires new location. Married; age 41. Will go anywhere, Excellent references. Address: Ad 4004, % Golfdom,