

- Indications, Ecology, Turf Troubles.
- 1—Diary, daily work and treatments. See Records.
 - 4—Diseases, See Blights, Diagnosis.
 - 1-3—Distributors. See Agents, Dealers. Also Machines (list).
 - 4—Divots. Golf term. See Patching, Plugging (method).
 - 4—Dollar Patch, Dollar Spot. See Brown Patch, Diseases.
 - 2—Drainage, Land.
 - 4-6—Drought, See Wilt.
 - 7—Dusts, chemical, see insecticides, fungicides.
 - 5-9—Earth, Earthworms, See Entomology, Insects, Worms, Soil.
 - 4—Ecology, Plant, See Indicators, Indications, Diagnosis, Soils.
 - 1—Electric, Electrical, Electricity, simple fundamentals, repairs.
 - 5-7—Elements, See Soil, Fertilizers, Major, Minor, elements, Chemistry.
 - 1-7—Emetics, poison, see Antidotes.
 - 7—Emulsions, See Sprays, Solutions.
 - 9—Entomology, Study of Insects Subject. See Insects.
 - 3—Equipment. Term applying to games and grounds furnishing. See Accessories. Ethics. Evaluation, prices, quality.
 - 4—Eye Spot, See Diseases, Zonate Eye Spot.
 - 1—Fairway-s term. Golf course fairways, areas.
 - 4—Fertilizers, subject. Fertilizing. (Also see Methods.)
 - 5—Field crops. See Cover Crops, Ground Cover Crops. "Green Manures." Legumes.
 - 1—First Aid, to Injured. See Emetics, Antidotes, Safety Rules, Precautions.
 - 1-4—Frost on grass, Frost Heave. See Winter seeding.
 - 7-9—Fumigants, Fumigators, See Asphyxiants, Gasses, Poison Gasses.
 - 1—Fundamentals, of study subjects. See "Why."
 - 4—Fungi, Fungus diseases, See Blights, Diseases.
 - 7—Fungicides, See Dusts, Sprays, Mercurials. See List, (Commercial).
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 - 4—Germination, See Viability, Seeds, Grass Seeds.
 - 1—Golf, The game of, requirements, etc.
 - 4—Grasses.
 - 4—Grass Seeds, See Seeds.
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 - 1—Greens, Golf, Bowling, See Bowling Greens, Lawn Bowling.
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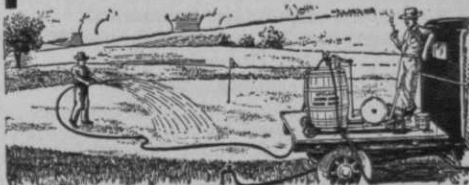
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- 7-8—Herbicides, See Weed Killers, Plant Killers.
- 7-8-4—Hormones, plant hormones.
- 3-6—Hose. See Irrigation, Supplies, Water hose, Garden Hose, List.
- 1—How to do things. See list of METHODS.
- 1-4—Humidity—see Weather.
- 3—Implements; See Tools, Special List, of, use - purpose.

- 2—Improvements, Improving, also see Methods list.
- 5-7—Indicators, Indications, See Soil Tests, Ecology, Diagnosis.
- 1—Information, Sources of, Books, etc. Also see Data, Tables.
- 1—Injury: To Persons, See First Aid.
- 4—Injury to Plants, Summer, Winter, Insect, Fungus, See Blights, Diseases, etc.
- 9—Insects. See Entomology, Bugs, Worms.
- 7—Insecticides, See List, also Sprays, Dusts.
- 6—Irrigation Subject, See Sprinkling, Watering, and Methods.
- 3—Irrigation, Supplies, Sprinklers, Hose, Pumps. See Lists.
- 2-5—Irrigation, Sub-Surface. Also see special devices for this, and Methods.
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- 1—Job operations.
- 9—June Beetles, See Entomology, Insects, Grubs, Beetles.
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- 1-2-4—Lawns. Also see Shaded, Shady Lawns.
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- 5—Legumes, See Cover Crops, "Green Manures," Field Crops.
- 5-7—Lesser Elements, See Minor Elements, Chemistry, Fertilizers, Soils.
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- 5-7—Major Elements, See Soils, Chemistry, Fertilizers, Elements.
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- 5-7—Materials, special purpose, not otherwise classified. See Lists.
- 7—Mercurials, See Fungicides, dusts, sprays.
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- 5-7—Minor Elements, See Lesser Elements, Soils, Chemistry, Fertilizers.
- 1—Miscellaneous, Special, not otherwise classified, subjects.
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- 7—N. Abbreviation for Nitrogen, See Soils, Fertilizers, Chemistry, Major Elements, Nutrients.
- 5-7—Nutrients, See Soils, Fertilizers, Plant Foods.
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- 7—P2 O5, See Fertilizers, Phosphorous, Chemistry.
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- 7-8—Plant Killers, See Herbicides, Weed Killers.
- 4-7-8-9—Plant Sprays, See Sprays, Insecticides, Fungicides, Oils, Emulsions.
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- 1-7—Precautions, See Safety Rules, Safety Measures.
- 4—Propogation-ing. See Stolonizing, Vegetating-ion.
- 1-7—Proportions, See Mixtures, Ratios, Rates.
- 1—Purchases-ing, See Buying, Prices, Values, Marketing.
- 1-4—Purity, Purities, See Seeds, Impurities, Minor, -Elements.
- 1—Putting Greens.
- 4—Pytheum, See Blights, Diseases.
- 1—Quality, See values, evaluation, buying, purchasing, marketing.
- 1-4-5-7—Quantity, See Rates, Amounts, Ratios.
- 6—Rain, Rainfall, See Weather, Irrigation, Moisture.
- 5-7—Rare Elements, See Minor Elements, Fertilizers, Nutrients, Soils, Chemistry.
- 1-4-5-7—Rates, Ratios, See Proportions, Mixtures, Amounts, Requirements.
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- 7-9—Repellents, Animal Pests, Insects, Insecticides.
- 1—Reports, See Records, Report Making, Presenting.
- 4—Rhizome-s.
- 1—Roads, See Grounds, Paths, Parking Spaces, Parking Areas, Drives-ways.
- 1-4-5—Rolling, (see Methods), Compaction, Frost Heave.
- 4—Roots.
- 4—Root Stock-s.
- 1-4—Rough, Golf, see Areas.
- 1—Routine-s.
- 1-7—Safety Rules, Precautions in Work,

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 - 4—Seeding, see Methods list.
 - 4—Shade, Shaded, Shady areas, lawns, ground covers, Grasses.
 - 1—Shrubs, See Grounds, Pruning, etc.
 - 4—Small Brown Patch, Diseases, See Dollar Spot.
 - 4—Snow mold, See Diseases, Winter kill, Winter injury.
 - 4—Sod, See Turf, Sod Nurseries, See Turf Nurseries, Sodding Methods.
 - 9—Sod Web Worm, See Insects, Grubs, Entomology.
 - 5—Soils, Subject of Special, Fundamental study.
 - 5-7—Soil Tests, See Indications, Indicators, Fertilizers, Soils, Diagnosis.
 - 7—Solutions, See Sprays, Emulsions, Nutrients.
 - 5—Sphagnum Moss, See Peats, Peat Moss, Mulches, Soil Conditioners.
 - 1-4-5—Spike-ed, ing, Spike Discing, Spike Rolling. See Aeration, Renovating, Cultivating, ion, Renovation, Compaction, Tilth.
 - 7—Sprays, See Solutions, Emulsions, Insecticides, Fungicides.
 - 1—Spring Work, See Rolling.
 - 1—Standards, of Maintenance, See Routine.
 - 1-4-5-8-9—Steamed, ing, Soil, See Sterilized, ing, Composts, Weeds, Insects.
 - 4—Stolons, Stolonizing, See Propagation, vegetative, Grasses.
 - 1—Study Subjects, Study Methods, See Subjects.
 - 1—Subjects, (see above)—of Study and Discussion.
 - 5—Subsoil.
 - 4—Summer, Injury to turf, see Injuries.
 - 1-2—Survey-s, ing. See Data, Tables, Charts, Areas, Maps-ing, Land, Diagnosis, Layouts, Drainage, Irrigation, Construction, Grounds.
 - 1—Systems, See Methods, Water-Irrigation.
 - 1—Table-s, See Survey-ing-s, Data, Charts, Information Tables.
 - 1—Tee-s, See Areas, Golf.
 - 1—Temperature, See Weather, Germination, Diseases.
 - 1—Tennis, Tennis Courts, Game, Areas, Lawn Tennis.
 - 1—Terms, Special category of names, expressions, also see Buying, etc.
 - 2-4-5—Terrace-s, See Grading, Slope, Shoulder, Bank-s.
 - 2-5—Tile, Land. See Drainage, Tiling.
 - 3—Tools, See list, Implements, Hand Tools, Grounds, Garden, Shop.
 - 5—Top Soil.
 - 5-4—Top Dress-ing-s, See Composts, Conditioners, Mulches, Soils.
 - 5-7-8-9—Toxic, Toxicants, Toxicity, See Soils, Poisons.
 - 1—Transplanting, see Patching, Plugging, Sodding, Stolonizing, also Method, Flowers, Trees, Shrubs, Plants.
 - 1—Traps, Golf, See Sand Traps, Bunkers, Animal Traps, Pests, Insects, Trapping.
 - 1—Trees.
 - 4—Turf, See Sod, Grass, Turf Nurseries.
 - 4—Underground Rootstocks, See Grass.
 - 1—Upkeep, See Maintenance, Care.
 - 1—Values, See Evaluation, Prices, Purchase, Buying, Quality.
 - 3—Valves.
 - 4—Viability, See Germination.
 - 4—Vitality, See Viability, Health of Plants.
 - 6—Water, -ed, -ing, See Irrigation, Sprinkling, Moisture.
 - 5-6—Water-holding Capacity, See Soils.
 - 6—Weather, See Rainfall, Temperature, Drouth, Summer, -Winter, Injury, "Seasonal," Wind-s, Forecasting, Humidity, Cloudiness.
 - 8—Weeds, plants, seeds.
 - 7-8—Weed Killers, -ing, see Herbicides.
 - 1—Weights, soil, seed, data, tables, buying.
 - 1—"Why"—Reason-s, diagnosis, fundamentals, causes.
 - 4—Wilt, See drought, drouth, summer injury, Irrigation, Drainage.
 - 4—Winter Kill, Winter Injury, Weather, Snow Mold.
 - 1-4—Winter protection-s, see Mulches, wind breaks, plant, shrub covers.
 - 1-2-3—Winter Work, indoors, outdoors, See Seasonal.
 - 4—Zonate Eye Spot, See Eye Spot, Diseases.

DENVER'S 6-YEAR PLAN

(Continued from page 38)

tan tourney. Eight players will win annual tickets for two years duration, at association expense to play the municipal courses. In this two-year period, they also will get monthly private lessons from a professional, also at the expense of the golf association. This would normally conclude the training unless some individual gave such promise the group should desire to single him or her out for further training.

Rewards for Better Pupils

"Attempts will be made to get private club memberships for the boys and girls showing unusual promise at the end of this six year program.

"If the association is financially able, it plans to award a university scholarship for four years to any young golfer chosen whose parents are unable to provide higher education.

"The operation of this entire program will hinge on the financial success of the first Denver Open, according to Dawson.

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Check off your Supply & Equipment Needs. Tear out and mail this sheet to *Golfdom, 407 S. Dearborn St., Chicago 5, Ill.* You'll get prices, literature and delivery information direct from the sources of supply.

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 Golf Course Const'n Engineers

Harrows—(spring tooth)
 Hole cutters
 Hose, $\frac{3}{4}$ " 1"
 Hose menders
 Humus
 Insecticides
 Landscape materials
 Leaf rake (power vacuum)
 Mole Traps
 Mowers: putting green
 whirlwind tee
 fairway rough hand
 Mower grinders
 Peat Moss
 Pipe, water
 Playground equipment
 Pumps (gals. per minute?.....)
 Putting cups
 Scythes (motor driven)

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 Seeders
 Sod cutter
 Soilscreeners Soil shredders
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 equipment filtration
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 Tee markers
 Tennis court surface material
 Tractors
 Tractor tires
 Tractor wheel spuds
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 Weed burners
 Weed chemicals



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 Handicap boards
 Handicap racks cards
 Mechanical Golf Ball Retriever

Pencils
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 Practice driving nets
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 Score cards
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 Spiked rubber overshoes
 Sportswear: Shirts Socks
 Sport jackets Rain jackets
 Windbreakers Slacks
 Tee mats Wood tees
 Tees (rubber) for driving mats
 Tennis nets
 Trophies



Club House

Adding machines
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 Athletes foot preventives
 Ath. foot prophylactic bath
 Bath mats
 Bath slippers
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 Kitchen equipment:
 Coffee makers
 Dish washers
 Dishwashing compounds
 Frozen food storage
 Ice cube machines
 Ovens Food warmers
 Ranges
 Refrigerators
 Slicing machines
 Vegetable peelers
 Glassware

Heaters: club house
 hot water
 Linens, dining room
 Lockers
 Movies of Golf Subjects
 Runners for aisles Rugs
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Club
 Title

Club Address

Town Zone (.....) State

All receipts from entry lists, ticket sales and miscellaneous endeavor will go to organizing the gigantic program.

"Experts conceive that if Denver gets this program, the nation's top amateur golfers in a half dozen or so years will originate here, just as the Jones-plan has produced America's top tennis players from southern California."

BACKGROUND OF CHAMPIONSHIPS

(Continued from page 25)

at Plum Hollow when the lag was reduced.

At St. Louis again was shown the need of thin strips of tape or some other means of underlining or otherwise making easier the locating of scores of leaders.

Club Regulation Enforcement

Inspection of clubfaces to see that they were in accord with USGA rulings provided some excitement at St. Louis. The players had to alter or discard some clubs at St. Louis. The inspection by the USGA at St. Louis was done by precision instruments which is the only way it can be properly done.

The club inspection was but one of numerous matters pointing to the logic of having one set of rules and standards for championship play and such rules and standards being established by an impartial and judicial authority.

It is obvious that the National Open is a far more rigid test of rules of golf observance than the PGA championship although Open qualifying rounds were featured by conflicting rulings on lifting and cleaning a ball on the green. Adverse weather, turf and maintenance conditions on PGA tournament circuit courses have accounted for general procedure contrary to the codified rules of golf. There were observed in both championships violations that wouldn't have been condoned by the rules-wise women playing in a Class B championship at a cow-pasture course.

Rules Are Disregarded

One rule flagrantly disregarded in both tournaments is Rule 18 (3) Touching Line of Putt. "The line of the putt may not be touched, except by placing the club immediately in front of the ball in the act of addressing it and as above authorized. It is not permissible to touch the ground behind the hole in order to point out the line of the putt." The "as above authorized" reference is to the paragraph of Rule 18 (2) which says:

"In moving any loose impediment with the club it must not be laid with more than its own weight upon the ground, nor may anything be pressed down either with the club or in any other way."

And that paragraph of the rule, too, was frequently violated.

It's easy to understand why pressure of the tournament players upon the PGA would result in easing the conditions of course severity and rules laxity. The tournament players are in a tough enough business without wanting to subject their nerves, skill or financial prospects to any avoidable risk. They forced out the stymie although that shot is one that a player with a golf champion's finesse ought to be able to play in demonstrating a spectacular command of a traditionally basic feature of match play.

The result of stymie elimination was to make the PGA championship less of a test of delicate golf technique and virtually a medal play event on a hole by hole basis instead of true match play. Even at that, the PGA finals certainly supplied more see-saw drama than the National Open 72d and 90th holes where the crises came as Snead holed a 20-footer to go into a tie with Worsham and missed a difficult 30½-incher to lose in the play-off.

The much-discussed measuring incident which determined Worsham to be an inch nearer the hole might not have occurred if Snead had proceeded under Rule 6 (2), part of which reads: "If by mistake a competitor play out of turn no penalty shall be incurred and the stroke cannot be recalled."

There is a possibility that the tournament pros would find that knowledge and observance of the rules commensurate with their authoritative status as shot-makers would ease instead of adding to the strain on them.

Tournament Strain Shows

The tournament schedule certainly takes a lot out of the players. Locke showed that by being a very weary fellow after missing a few makeable putts in the last round at St. Louis to lose his title chance through faulty performance in the department where he usually is superb.

When Hogan, Locke and Snead were knocked out in 18-hole rounds at Plum Hollow there was some expressed belief that absence of these three super-stars would reduce the gallery and that the 18 hole rounds should be abandoned because they are unfair and too risky for the name players who draw the big gates. But the absence of the three headliners apparently didn't have any costly effect on the gate. There are some who maintained that if fear

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Pro-Greenkeeper — 36—War vet—married—desires change for next season. Excellent references. 10 years' experience. Address Ad 701, c/o Golfdom.

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Golf Professional-Manager, wife excellent cateress, desires change to club in West or Midwest. Finest character, credit and ability. References. Could be available Oct. 1st or sooner if necessary. Address Ad 706, c/o Golfdom.

Position wanted by efficient man as Pro or Pro-Greens Club at good club. 25 years' experience. Married; no children. Member NSGA and past PGA member. West or So. West location preferred. Available now. Address Ad 707, c/o Golfdom.

WORTHINGTON OVERGREEN MOWER for sale. For further information write Ed. Mattson, Hopkinsville Golf & Country Club, Hopkinsville, Kentucky.

Golf Professional wants position with a good golf club. Good business man, excellent instructor, capable of assuming full charge of the golf course, university graduate, member of the PGA, married, 37 years of age, excellent references. Address Ad 708, c/o Golfdom.

Successful golf business man desires new location as Greenkeeper or as Manager and Greenkeeper. Finest references for work done as Greenkeeper, Pro and Manager. Especially well qualified to handle a southern club. Age 47, married, no children. Thoroughly dependable, competent worker. Address Ad 709, c/o Golfdom.

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PERSONAL

GOING TO TRAVEL? SEND FOR OUR TRAVEL expense information booklet. Interesting. 15c coin. American Tourist, 506 N. Oakland, Indianapolis, Indiana.

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What's YOUR course maintenance problem? Qualified advice by national authority. Enclose \$5 check for service fee. The answer, or information source, or refund. Write: SPECIAL SERVICE, Box 458, Mountain View, N. J.

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WOODRIDGE GOLF & C. C.

254 acres, 27 holes, rolling, wooded with river running through property. Very scenic, located 26 miles from Chicago loop on state route 53—2 miles south of route 34, Ogden Ave., at Lisle, Ill., on C. B. & Q. R. R. Highly improved clubhouse, all modern, 90' x 64', 2 stories. Lockerhouse 70' x 30', 2 stories, coffee shop and office, 42' x 42' with English basement and other buildings, all with cement floors. Gas hot water heat. Has not been operated for 2 years but is in good condition and can be put back in shape for play quickly at small cost. Improvements cost over \$200,000. Will carry back part of purchase price. For further information write E. E. Bain, Lisle, Ill., or phone: Downers Grove 8193-M2.

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GOLFDOM, The Business Journal of Golf. Published monthly, except November and December. Subscription rate—\$2.00 per year, Canadian and Foreign \$2.50. Herb Graffis, Editor; Joe Graffis, Advertising and Business Mgr.

Publication Offices—407 So. Dearborn St., Chicago 5; Phone Harrison 5941. Eastern Representative—Albro Gaylor, 20 Vesey St., New York 7; Phone, Cortland 7-1668. Printed in U. S. A.

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of losing headliners early in the competition is to be a major element in determining the plan of the PGA championship why not simply give the stars a pass through the perilous stage instead of having them play in a tough championship.

The shot-making demonstrations prior to the championships gave the clubs really something to sell to the public that paid to witness practice rounds. That PGA feature is a great addition to the tournament shows.

It could be extended by a tie-up of illustrated lessons in the tournament programs. The program advertising isn't what it used to be when the corporation tax situation favored loose use of the 10 cent dollar.

The Michigan PGA took colored talking motion pictures of star shot-makers at Plum Hollow and before long will announce terms under which prints of the film may be secured.

Clubhouse operation at St. Louis CC and Plum Hollow was remarkably swift and smooth as far as the public was concerned although the managers at both clubs were operating under severe handicaps. The St. Louis clubhouse is large and sprawled out. The Plum Hollow clubhouse is small and not laid out to care for heavy rush patronage. But in both cases the emergency was

met so players, members, guests and the press were served better than could have been imagined in advance by anyone who knew the problems involved.

Whoever thought of getting Johnny Manion on lend-lease from his club to officiate in the lockerroom at St. Louis deserves commendation for an innovation that should be made standard practice at major tournaments. Manion, a tournament veteran himself and widely acquainted with player, official and press personnel, had all the answers.

A tournament seldom is much of a break for the pro of the host club. It too often means that he is practically out of business during the days of the tournament. There have been some exceptions, notably in 1930 during the Jones finale at Merion when the very canny George Sayers sold a record number of the then new sand-wedges. At Plum Hollow Sam Byrd's pro shop did big business in golf shoes, sox and hats with the gallery. The Hagen company had a display of playing equipment and apparel in a tent that also did very well.

The pro shop can be an addition to public service at a National Open and Alex Ayton at St. Louis had made tentative plans for taking care of this feature but the plans did not receive official approval.