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For Better Golf

At 8 for 25¢ Celluloid REDDY TEES represent 100% value.

At 18 for 25¢ Birchwood REDDY TEES represent 100% value.

—But some golfers want cheaper Celluloid Tees —therefore, we have placed on the market, in addition to REDDY TEES—

THE CELLULOID TEE

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RED, GREEN, BLUE, YELLOW
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The Original Golf Tee of the World

The Nieblo Mfg. Co., Inc.
Executive Office
38 East 23rd Street
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MINTON

HICKORY GOLF SHAFTS

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Why do Bobby Jones and Leo Diegel both use Hickory Shafted Clubs?

Why should you experiment with new fangled substitutes? What’s good enough for Jones and Diegel is good enough for us. Why are some of our former champions so far off their game this year with substitute shafts in their Bags? There MUST be a reason!

The Progressive Pro can easily see the plain handwriting on the wall.

MINTONS have been Hickory Golf Shaft headquarters for 25 years and will continue to be—always furnishing highest quality—and taking care of both Professional and Manufacturer.

Finished Putter Golf Shaft Clubs for Miniature Golf Courses—also Pro Finished Putter Shafts furnished promptly—in any quantity.

There is NO SHORTAGE of Good Hickory Golf Shafts at the Minton Plant.

T. W. Minton & Co., Inc.
BARBOURVILLE, KY.

The advertisers pay for your GOLFDOM; deal with them.
Twelve Month Play Only One of Sunkist District’s Problems

By ARTHUR LANGTON

THE Southern California coastal plain is that section of the state bordered on the north by the Sierra Madre mountains, on the south by the Mexican border, on the west by the Pacific ocean, and on the east by a range of mountains and a desert. Los Angeles is located at the northern end of the coast line and San Diego is at the southern extremity. Peculiarly enough this strip of land, which includes about 11,000 square miles, is the only plain of any significance in the whole of California not separated from the Pacific by one or more ranges of mountains. This physiographical fact makes for climatic and growing conditions such as are found nowhere else in California or the United States, and also creates some unique greenkeeping problems.

The scanty moisture blown in from the ocean during the winter and spring months is stopped from being deposited anywhere but on the plain by the mountains which guard it. Standing on any of the mile-high peaks in these ranges one can look toward the ocean and see fertile orchard lands dotted with prosperous communities. The ocean breezes bring moisture and make the climate comfortable at all times of the year.

Turning around one can see something entirely different, a vast area of dry, hot waste, barren of vegetation except such desert growths as cactus, sage, and greasewood. Snakes and lizards make their home there, but all else are kept away by the heat and the lack of moisture.

Thus it may be demonstrated forcefully that these mountains are connected vitally with conditions in Southern California. But also in another sense are they responsible for the phenomenal development of the territory: the soils, which will support almost every kind of plant life, are basically a decomposition of the granite which once made the mountains greater than they are today. This granite has been decomposed by atmospheric conditions and then washed down into the valleys below by the seasonal rains.

Course Betterment Is Theme

Because of the balmy climate, the fertile soil, and the people who came to the district to live, it was only natural that many fine golf courses should be built, which they were to an inordinate degree characteristic of the state. This was until a few years ago when the saturation point for the prevailing conditions was suddenly reached and passed, with the result that several clubs met financial disaster. Within the last few years the growth of courses has been along the line of improving or enlarging those already established rather than in the construction of new ones.

After the orgy of construction, Southern California golf officials set about the very serious work of improving their courses with the admirable aim in view of making them the finest in America. The ground was examined where turf growth was not satisfactory and faults were corrected. In many cases deep-well and pump systems were substituted for rather unreliable community water supplies, a highly necessary procedure because water officials were apt to cut the amount of water allowed to golf courses toward the end of the six-month dry season. The introduction of bents and high powered fertilizers made for better greens, but also caused a lot of grief until local greenkeepers began to learn how to obtain better results. The period of probation for bent grasses was one of wild experimentation which has not died away entirely, although investigation is following more uniform lines than it did formerly.

Gradually some truly magnificent courses in this district began to evolve which were at least on the same plane of perfection as their eastern counterparts. More and more visitors were attracted by them and all efforts were bent successfully upon improving them. Players of note from all
parts were attracted by the famous mid-winter tournaments with their offer of glittering prizes.

A close approach to golfing perfection was achieved in spite of the fact that California philanthropy was involved. Here an explanation is required: the richer people of California, the golfing class, are unusually loath to part with their money for any reason whatsoever. It is a phenomenon inexplicable but recognized by solicitors for charity organizations and community projects of any kind, and by treasurers of golf courses. It is not my purpose to attempt an explanation; suffice it to say that wages of greenkeepers in the West were, and are, less than those of Eastern greenkeepers, and they most certainly deserve an increase. Furthermore, California golfers are in the habit of demanding more. On the coastal plain area they expect 355 days of perfect playing conditions. On the other ten days they grudgingly allow rain to fall. Players in the state have become so used to their daily round of golf that on many courses greens are not taken out of play while being topdressed or repaired in any way.

Rely on Mechanical Methods

From reports it would seem also that Eastern courses employ more men than do those of the West; that is, on a basis of men per job. Eastern courses do not have four, five, or six men devoting their time exclusively to irrigating fairways. It may be because of the paucity of employees that local clubs rely upon machinery to do much of the work. A Southern California greenkeeper visiting a large Eastern course was surprised to find that six men were employed in the topdressing of a green. He was astounded to learn that this gang was satisfied to complete two and one-half greens a day. It was the Easterners' turn to be astonished when they learned that the Westerner was accustomed to topdressing all of his 18 greens in not more than three and sometimes in two days with a gang of three men.

But this is a digression. Getting back to the courses of the Southern California coastal plain, from the players' standpoint they are of three varieties or classes. In the first class are the courses of private clubs with money enough to build and maintain them as championship layouts. On them perfection of fairway, tee, and green is taken for granted; bunkers are kept flawless; rough is carefully cultivated and trimmed; hedges have a milli-

GOLF and GOLF BALLS
Do They Work Together?

It costs money to play golf . . . and Golfers know it. But the average golfer . . . and there's a few million of them . . . is satisfied provided he derives pleasure from the game which is somewhere in line with the investment.

There is one unnecessary and aggravating premium exacted on some courses that might well be dispensed with . . . a premium that often causes the entire investment in the game to be questioned.

This premium is represented in golf balls . . . and there's a few million of them . . . that have to be left behind on the course because they happen to lie in a temporarily undiscovered position.

They belong to these golfers just as much as their bags or their clubs . . . but the minute they remain "at large" unmarked, ownership becomes easy to transfer and the game goes on, and so do the balls.

The large majority of these undiscovered (by the player) balls become part and parcel of another game that has very little in common with a sport as clean as golf . . . the gyp ball business.

Thousands of dollars are represented in this continuous interchange of unmarked balls which might otherwise be expended for the purchase of new and legitimate equipment in which the pro would enjoy a larger share of profit.

Contrast this picture with other courses where Fulname Marking is the rule of the club and the Fulname System of Golf Ball Control is in force . . . courses where pros are happy and players get more pleasure out of the playing and an adequate return on their investment. Think it over.

The Fulname Balmark Machine and the plan that is making for better golf in over 3,000 clubs is available under club terms that require no investment of club funds. A request will bring full details.

The Fulname Company
707 Southern Ry. Bldg.
CINCINNATI OHIO
itary appearance; and no detail is overlooked. Riviera, Wilshire, Los Angeles, Flintridge, Bel-Air are some of the clubs which come in this category.

In the second class are a large number of courses which present excellent playing conditions, but which lack the polish of the uppermost class. Just golf courses constitute the third class, and its number is comprised of clubs gone to seed financially, some public and municipal layouts, and courses supported by small communities. While the quality of these courses is not of the finest, there is a tremendous amount of golf played upon them, and the greenkeeper of each, restricted in expenditure, has a year-long struggle to keep the balls rolling.

As has been indicated, this territory's greatest problem is to keep its more than 80 courses fit to play upon every month in the year. This necessitates the application of large amounts of water which in itself is the greatest concern of the greenkeeper. There are no natural rivers or lakes in this area from which water may be obtained; clubs must buy it from communities or get it from their own wells and pumping equipment. It is not unusual for a club to buy more than $7,000 worth of water each year. One club received a bill for $1,400 for water supplied in the month of July of this year. On the other hand, those clubs which want their own plant must pay for pumps, tanks, a deep well, and a monthly power bill which may amount to about $200.

When and how much to irrigate are two knotty questions that must be solved by the Southern California greenkeeper. Courses near the mountains usually are built upon granitic soil which, though fertile, is very rocky and gravelly and will not retain surface moisture. Water can be poured on these layouts all night and half an hour after it is turned off not a sign of it will be found anywhere. Nearer the coast and in the valleys and lowlands the opposite condition is experienced. Here courses have very finely grained soil, sometimes adobe, which will not allow water to penetrate, thus necessitating the use of tiles and drains. One course has had to resort to digging open ditches through the fairways as the only means of removing surplus water. Yet if a large quantity were not applied the ground would set like concrete and the grass would wither. Some of these courses have found that lime is very beneficial because it gives the soil a more granular texture, thus allowing the water to penetrate.

When to water has caused much loss of sleep on the part of Southern California greenkeepers. Fairways, of course, are watered during the night, but greens present a different proposition. It has not yet been demonstrated to the complete satisfaction of Western greenkeepers that there is or is not a connection between the time of watering and the growth of brown-patch. Some greenkeepers water their greens only in the early morning when the ground is cool; others water during the night and the early evening. So far there has not been a comparison of methods and results to arrive at any definite conclusion, and all greens seem to be subject to the scourge in a greater or lesser degree.

A grass which constitutes a universal problem in this territory is Bermuda, popularly known as "devil grass." It is harsh and stringy and only constant surveillance will keep it out of greens. Most fairways are of this grass exclusively because it cannot be eliminated and because it provides a good mat for the ball. Its worst points are its coarseness and winter looks.
When re-ordering Tees ask for

"PEG"

REG. U. S. PATENT OFFICE

Colored tops or all White Celluloid

"PEG" is clean, smooth and pleasant to handle.

Mounting sales clearly indicate that the trend is to "PEG," the Celluloid Tee that is so easy to use.

Your Jobber has it.

GRANBY MFG. CO., Inc.
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Again—in 1930
TUFOHORSE GOLF BAGS lead all others in Pro Shop Sales!

And, as further proof that TUFOHORSE Quality, Policy, Price and Profit are right, the margin of leadership in 1930 is greater than ever.

It's not too early to ask Mrs. Tatterbag if she doesn't think Mr. Tatterbag would like a TUFOHORSE bag for Christmas.

The TUFOHORSE Line includes bags made from: Genuine Pigskin, Walrus, Elkskin, Cowhide, DuPont Fabrikoid, Wexford, English Service Duck and Heavy Canvas... with a wide variety to choose from.

The new photographic display hanger is doing a good job of selling for hundreds of Pros. Send for yours—today.

"SUPERIOR" MODEL
Lists $65.00

DES MOINES GLOVE & MFG. CO.

DES MOINES, IOWA

You save time and money by answering GOLFDOM ads.
Fall Fairway Fertilization for Full Season Results

By B. R. LEACH

"Is this train ever on time?" growled the grouchy passenger.

"Oh," replied the conductor, "we never worry about it being on time. We're satisfied if it's on the track."—Wall Street Journal.

Ask the average greenkeeper what he would like to have in the shape of an increase from his club and the reply would in all probability be as follows:

1. An increase in salary (a substantial one, say $10 per week).
2. An increase in the amount of fertilizer for the fairways.

Oddly enough increases in both of the above items are equally as scarce if we consider golf clubs as a whole.

"Increase in pay!" said one of my greenkeeper friends in the Philadelphia district recently. 'Great guns, I haven't had a boost in my pay since the second battle of the Marne, and I only got it then because I had a fat job all lined up in the shipyards.'

"And when it comes to fertilizer for the fairways of this tinpot cow-pasture that the members insist on calling a sporty course, why when I even think about it my neck gets so hot that I can hear my celluloid collar fairly sizzle." The fairways of this crab grass paradise have had virtually no fertilizer since the Spanish-American war.

"In January a year ago they promised me $2,000 for fertilizer and work on the fairways. Did I get it? I did not. The chairman spent the jack for an asphalt parking place."

"Again this spring," continued my irate friend, "they gave me the same line of bull, but along in April they got in a gang of fast talkers, and then what was left of my fertilizer money went into the building of a blankety-blank rock garden. There it is over on that slope. All you need is a six inch rattlesnake on one of those stones and you could imagine yourself in the wilds."

That the above instance of a greenkeeper's resentment at the starving of his fairways is far from being unique is evidenced by my experience as a consultant when a golf club would pay me a fat fee for advising them on the subject of grub control, and every other little thing they could think of on the spur of the moment.

On my arrival at the club the greenkeeper and myself would take a walk around the course, and the conversation would go something like this:

Greenkeeper—"What do you think of the fairways?"

Me—"Lousy."

Greenkeeper—"Ain't it so. Tell the chairman about it when he comes this afternoon."

Me—"O. K."

Greenkeeper—"O. K."

Me—"What kind of fertilizer do you prefer for fairways?"

Greenkeeper—"Right over here is a small patch I treated with Spivins Non Plus Ultra brand last fall. It sure does put pep in the grass."

Me—"Spivins is good stuff and the price is right. How many tons do you need?"

Greenkeeper—"I ought to have 20 tons. Tell the chairman to buy 40 tons. He is tight and will cut your estimate in half on general principles."

Me—"O. K."

Greenkeeper—"O. K."

Whereupon we adjourn and have a drink of ginger ale. That afternoon I meet the chairman, who proves to be a retired corset manufacturer. He reads my stuff in GOLFDOM and considers me two or three cuts above the common herd. I tell him that he has a wonderful course, whereupon he swells up like a poisoned pup. I casually intimate that the fairways are about ripe for a good shot of fertilizer in order that there may be no let down in the fine course condition. He affirms that he has been thinking the same thing himself (which is, politely, romancing). I suggest that 40 tons of
EVEN AFTER SUMMER GOES...

Keep on FIGHTING BROWN PATCH

Don't let autumn trick you into a truce with brown patch! Summer weather may linger, and as long as it does, brown patch menaces your costly greens.

Leading greenkeepers now use Du Bay Semesan and Nu-Green to protect their turf until all danger is past. They know brown patch fungi can not thrive on greens treated with either of these effective fungicides.

A pound of Semesan or Nu-Green to 50 gallons of water will treat 1000 square feet of turf by sprinkling. Applied by power sprayer, 50 gallons of Semesan solution will treat 2000 to 3000 square feet—50 gallons of Nu-Green solution, 1500 to 2000 square feet. Semesan is recommended where soil is highly fertile; Nu-Green, where the fertility is lower.

Early spring damage from snow mold may also be prevented by treating greens with Semesan just before the ground freezes. Use 50 gallons of solution to each 1000 square feet of turf.

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Order now from your seedsman or golf supply house. Bayer-Semesan Co., Inc., 105 Hudson St., New York, N. Y.
Spivins would be about right. He thinks that 40 tons would be more than they can stand right now, but they will certainly buy 20 tons. All of which is simply added proof of the old adage that greenkeepers, in common with all other poor mortals, are rarely prophets in their own bailiwicks.

Fairways Need Help

At any rate the fact still remains that golf clubs in general are still spending too much money for grass seeds and not enough for fertilizer in respect to fairway management, although the trend is slowly changing in this regard, due mainly to the steady hammering of the turf journals and fertilizer companies, whose efforts are bent on educating the clubs to appreciate the futility of sowing grass seed on fairways so poor that they are unable to maintain the thin stand of grass already present.

Since the annual application of fertilizer to the fairways is steadily increasing in this country there are certain pertinent facts which may well be considered at this time.

1. The experiment stations and turf research organizations have a pronounced tendency to consider fertilizer purchasing from the price angle. They will tell you, for instance, that in fertilizer A, a pound of nitrogen costs 19 cents while in fertilizer B it costs only 17 cents. Consequently they will tell you that fertilizer B is the best buy. Maybe yes, maybe no. Price does not always tell all the story of a fertilizer, especially when it is to be used for a specialized purpose such as fairway treatments. Maybe the nitrogen in fertilizer B is quick-acting and won't stay with you over a growing season, while the nitrogen in fertilizer A is slower acting and will stay with you throughout the season. Common sense dictates the answer that fertilizer A at 19 cents per pound of nitrogen is a cheaper buy than fertilizer B at 17 cents per pound of nitrogen when you consider the labor cost of repeated applications throughout the season of small quantities of quick acting fertilizer B.

2. When I apply fertilizer to fairways I want to apply something which will keep the grass up on its toes for the entire season, thereby doing away with the necessity of additional costly applications of fertilizer at intervals of 30 or 60 days. Applications of fertilizer at short intervals is o. k. for greens because the area is small and the labor cost relatively unimportant, but such is not the case with fairways where we are dealing with acres rather than square yards. For this reason I want to get the fertilizer on the fairways and be done with them for another year.

A Long Pull for Fairways

3. In order to confine fairway fertilizer treatments to one each year it is essential that the fertilizer mixture be a sort of long pull mixture rather than of a flash-in-the-pan makeup. Such a long pull mixture should contain some quickly available nitrogen, usually of an inorganic form such as ammonium sulfate, but the great bulk of the nitrogen in the mixture should be in an organic form since this form of nitrogen is slower in its action, is gradually made available to the plant and thereby carries the grass along until the end of the growing season.

With this sort of a balanced mixture the quick-acting, inorganic nitrogen gives the grass a kick in the ribs and makes it push up a heavy green growth early in the spring when the ground is cold, at which period the organic forms of nitrogen are inclined to be very sluggish. By the time the ground has warmed up the inorganic nitrogen has shot its wad; the warm soil then begins to act on the organic nitrogen and the grass gets the additional food as needed throughout the remainder of the growing season.

The long pull fertilizer mixture should also be adequately supplied with phosphates and potash in order that the nitrogen of the mixture may be adequately supplemented and reinforced by these two necessary ingredients.

4. I do not propose to discuss any specific mixture formulated along the above lines or the amount that should be applied per acre. These are questions which had best be carefully discussed with your local dealer and the service departments of the various sound fertilizer companies catering to golf courses. Conditions differ so greatly in the various sections of the country that blanket recommendations are absurd, to say nothing of being dangerous.

5. If you plan to buy the various ingredients of this fertilizer mixture and mix them yourself, o. k. I mixed five tons of fertilizer on one occasion and the Madam made me sleep in the barn for three nights, until the odor dissipated somewhat. It is my personal opinion that the place to mix fertilizer is in a fertilizer
Give Your Fairways and Greens a Complete Feeding—Now!

Advantages Of Fall Feeding With

Armour's SPECIAL TURF FERTILIZER

Increased stooling and immediate thickening of the turf.
Stronger, larger, root structure.
Improves color, texture and wearing qualities.
Develops grass ahead of weeds.
Gives later fall play.
Lessens winter damage.
Insures earlier spring play.
Lessens turf diseases and saves money.

A LIBERAL application of ARMOUR'S SPECIAL TURF FERTILIZER develops a strong active root structure. It feeds the entire plant, not only producing sufficient top growth and a healthy green color, but it develops a root structure which is able to draw from Nature's stores the elements and moisture necessary for continued growth and strength.

Insoluble fertilizers lie on top of the ground and the grass roots turn upward to get the plant foods which they contain. This gives the grass a shallow root structure which cannot withstand severe droughts and winter freezing. The plant foods in ARMOUR'S SPECIAL TURF FERTILIZER are largely soluble. They enter the soil with the first good rain or watering and are suspended in the soil waters until needed. The grass roots grow downward after these plant foods, thus making deeper, heartier root growth which better withstands disease, the extreme cold of winter and the destructive hot dry summers such as we have just experienced.

Make an application of 300 lbs. to 500 lbs. on your fairways and 15 lbs. per thousand square feet on your greens at once. Have a good playing turf this Fall and insure early play next Spring. If your budget does not permit a complete program pick out the fairways and greens which are most in need of attention. Results will prove it.

Correspondence solicited from dealers and jobbers.

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THE HOLE-IN-ONE CLUB
GETS A NEW MEMBER

WHEREVER it's played the Thompson Greenkeeper Sprinkler has been unanimously elected to the Hole-in-One Club.

This new sprinkler, by the world's largest exclusive sprinkler manufacturer, has made most remarkable plays on courses whose operating water pressure ranges 15 to 25 pounds... It sprinkles perfectly at all times, giving absolutely uniform distribution over an area of 60 to 90 feet.

If your water pressure is low, you'll want the Greenkeeper. If it's higher than 25 pounds, there's the Thompson Master... Each is guaranteed against defective workmanship and materials for 3 years.

Your equipment dealer has 'em both.

Fall versus Spring Fertilization

There seems to be a decidedly firm conviction in golf circles that early spring is the time to apply fertilization to fairways. As a matter of fact early spring is a good time to carry out this operation but it most certainly is not the only time in the year when fertilizer can be applied to the fairways with success, in fact there are many sound reasons for doing this job in the late fall rather than early spring, the actual application of the fertilizer being time for that period between the cessation of grass growth and the freezing of the soil. This period varies in the different sections of the country, but in the vicinity of Philadelphia it usually runs from November 5th to 20th.

At this time of the year the greenkeeping staff has more available time in which to carry out a major fertilizer spreading job than it ever has in the spring when there are a thousand and one things to do and half enough time to do them in.

Furthermore, unless there has been an unusual amount of rain, the fairways in the late fall are firm and it is much easier to get around with the spreader without mussing up the turf. This is especially true in heavy clay soil areas which dry up slowly in the spring, but are firm in the average fall season.

However, the most telling argument in favor of fall fertilizer treatments of the fairways consists in the fact that by doing so you get a quicker kick out of the fertilizer during the early spring months.

This fact can be readily proved by treating a patch of fairway with fertilizer in the late fall and treating a patch along-side it with the same quantity of the same fertilizer in the spring. The fall treated