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9-BLADE WELDED REEL

New HIGHER FREQUENCY

Jacobsen offers you a new, more powerful Greens Mower for 1953. New engine provides 2¼ hp. with only a one-pound increase in mower weight. This means more power at the blade... more power for transport . . . greater over-all operating efficiency.

The new welded reel has nine blades, providing a higher cutting frequency for an unequalled putting green smoothness. And Jacobsen Greens Mowers have long been famous for their superior cutting ability.

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The Desert Blossoms

Dr. E. J. Workman, president, New Mexico Institute of Mining and Technology, and Jim Voss, Michigan State grad, transform wasteland into attractive course at Socorro, N. M.

By DEE LINFORD



Excellent turf was on Socorro course when it opened Sept. 28 with an exhibition match. New Mexico champion "Spec" Stewart of Albuquerque CC in foreground. At far left (white shirt and tie) is NMIMT Pres. E. J. Workman who sponsored the course.

Newest first-class golf course in the arid Southwest is at Socorro, N. Mex., home of New Mexico Institute of Mining and Technology and seat of minerals-rich Socorro County. Sponsored and constructed by the Institute and its energetic president, Dr. E. J. Workman, the 9-hole course is 3300 yds. long and luxuriantly grassed. Those who have played the course pronounce it an interesting layout.

Socorro is a small abode town of colorful heritage, set in the Rio Grande Valley, almost exactly midway between Albuquerque and Truth or Consequences. Some 60 years ago it was the smelting center of a rich mining area, the largest and busiest city in New Mexico - proud possessor of an opera house, a racetrack, cock pits, and all the usual manifestations of prosperity and "culture" in that flambuoyant era. But the boom days passed, and by the beginning of World War I, Socorro had reverted to its historic status as a small trading town, a way-station on the oldest highway in the United States, a supply point for the surrounding miningagricultural area.

Golf first came to Socorro in the middle 1920's, along with that new type of American migrant, the rubber-tired tourist, and the so-called tourist industries. Times were good, and the stirrings of civic pride prompted the newly-formed Socorro Businessmen's Association to provide their community with facilities for playing the fast growing game of golf.

Then as now, the terrain around the town was arid and hilly, slashed by deep arroyos which cloudbursts converted into raging floods, overgrown with greasewood and crusted with several centuries' accumulation of discarded trash. (Socorro counts its history from Coronado's visit in 1540). But the pioneer Socorro golfers were not daunted by obstacles, either in building or in play. On that first and very primitive course, fairways were cleared of shrubbery and dragged, but no grass was planted because — unwatered — the seed would have been thrown away. The greens were of oiled sand, tees were concrete slabs with narrow sand channels, and the hazard was to strike the ball without snapping the handle of the club. Fastidious players dragged the fairways before venturing out, and old timers aver that finding more balls than a player lost in the boondocks was considered a winning score! The going was really rough.

First Course Abandoned

Such was golf in Socorro in the 1920's and 1930's. By 1940, the intrepid devotees had weakened, and the course fell into disuse — to be quickly reclaimed by the ever-encroaching greasewood and mesquite, the ever-shifting dust. For more than 10 years thereafter, civic pride yielded to inexorable circumstance, and Socorro golfers motored 75 miles to neighboring cities to play.

In 1946, Dr. E. J. Workman of the New Mexico Research and Development Laboratory in Albuquerque was appointed president of New Mexico School of Mines (now New Mexico Institute of Mining and Technology), the state technological college in Socorro. Removal of the Laboratory to the Socorro campus resulted in a sudden influx of population which the town's facilities were not adequate to meet.

Dr. Workman, one of the pioneer physicists in the study of cloud precipitation and other "miracles" of science and engineering wasn't daunted by prospects at his new scene of activity. With income from the laboratory, he built a new residential area for employees near the campus, and needed buildings for the Institute. Taking an active interest in the physical, as well as the academic expansion of the institution, he has added hundreds of trees and many acres of lawn to the campus landscape. Then, a golf enthusiast of many years' standing. Dr. Workman began thinking in terms of a modern, grassed course on the site once occupied by the rustic links of the 1920's.

Accomplishing the "Improbable"

There were skeptics. But those familiar with the Doctor's habit of accomplishing the improbable did not scoff. Among the latter was James E. Voss, landscape engineer, who accepted the task of planning





More than 2500 dumptruck loads of rock were removed from 33 acres in clearing for the NMIMT course. Rock was moved to be used effectively in course construction.

and constructing the Socorro course as his first major job assignment after receiving a B.S. degree in landscape architecture from Michigan State College in 1950.

In Voss's words: "Our first problem was water. An abandoned gravel pit was enlarged and banked to form a 21/2 million gal. reservoir which was lined with 8 in. of clay, overlain by 2 in. of crushed rock to break up destructive wave action. A new 120-ft. well was sunk and a Peerless pump equipment with a 15 hp motor was installed. A 12-in. pipeline was run underground from the pump to a rock-bed outlet, giving the appearance of a natural spring as the water rises out of the rocks. A stream bed was dug to the reservoir some 400 ft. away, and lined with clay, caliche, arroyo gravel and dirt, to give a natural effect.

"Next, the 40-acre course area was cleared of brush, surface rock, and old trash, and a 25,000-ft. Transite pipeline was laid. Ditches for the latter were gouged with a road maintainer set at an angle and ranged from 18 to 24 in. deep, well below the frost line. Main channels run the length of all fairways, and a system of laterals supplies water wherever needed. A pumphouse was constructed, whose intake extends some 80 ft. into the lake. Three 25-hp. pumps are capable of forcing 900 gal. of water through the line each minute, to 200 giant Buckner sprinklers. Lines are composed

More than 200 Buckner sprinklers, supplied by 25,000 ft. of Transite pipe, were installed to quickly get and keep fine turf on the NMIMT 9-hole course. In background is tower of research laboratory of the university's Research and Development division, income from which financed course construction.



Features of TOP-FLITE SYNCHRO-DYNED Clubs ... Loaded with Sales Appeal

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Synchro-Dyned Top-Flite Clubs promise the golfer more uniform timing, greater consistency, accuracy - the nearest thing to complete golf shot control. When you try these sensational new clubs, we believe you will agree with many representative golf professionals that they are the easiest clubs you've ever played.

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SPALDING sets the pace in golf

January, 1953

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Reservoir stores 21/2 million gal, water that made desert blossom with New Mexico Institute of Mining and Technology course. Reservoir is water hazard on 6th and 7th holes. In the background is 7000 ft. Socorro Peak.

of 4- and 6-in. Transite pipe throughout; risers are of $1\frac{1}{2}$ -in. galvanized pipe. Most trenches were cut through very rocky ground; therefore much pipe was laid in 6 in. of sand, for protection.

Remove 2500 Trucks of Rock

"After plowing, some 2500 truckloads of rocks were removed from the area. The rock was put to good purpose as fill material, for rip-rapping slopes, and in constructing dams and levees to divert runoff from the mountains and higher plains in rainy weather. Also, the rock was used to provide bases for greens. At each green site, the rocks were laid in the desired shape to a depth of 12 to 14 in., then covered with a 2-in. layer of cinders to fill in voids yet insure proper drainage. A 2-in. layer of straw and manure was added to the cinders, and 12 to 14 in. of top soil followed. The top soil was composed of drainage ditch clay from the river-bottom farming region around Socorro, mixed with sharp sand and peat moss at a ratio of 1:1:1/3, respectively.

"Generally speaking, fairways follow the arroyo bottoms, where alluvial fans provided adequate topsoil. However, it was necessary to work the rocks out by repeated disking, levelling, and floating. Yellow-blossom clover was planted in the autumn for a green manure crop, and before redisking the fairways were enriched with animal manure hauled from farms and stockyards in the region and spread at the rate of 20 tons to the acre.

"When all soil was ready, the greens were planted in bent grass, fairways in Bermuda, aprons and tees in bluegrass and fescue. Some 1000 trees and shrubs were planted, including fruitless mulberry, Lombardy poplar, gingko tree, flowering peach and quince, globe willow, honeysuckle, flowering almond, lilac, sweetgum, and pyracantha."

The course was opened to public play on September 28, just 19 months after Jim Voss first walked over the area with Dr. Workman to size up the task ahead of him. It has a par of 36. Of the nine holes, five have a par of 4, two a par of 3, and two a par of 5. Picturesque holenames reflect the nature of the course: 1. The Doctor (commemorating Dr. Workman), 2: The Devil's Gulch, 3. Ladies Delight, 4, The Mountaineer, 5. Grand View, 6. La Luguna, 7. Jim-Dandy, 8. The Arroyo, 9. Lost Trail.

The course is open to the public. Playing fees are low, and the facility is very popular with the townspeople of Socorro, as well as with students, faculty, and staff personnel at NMIMT. More than 500 players used the course in its first month of operation, many coming in from other communities. The town is as pleased as the Institute, and golf definitely has come to Socorro to stay.

Western Golf Assn. Elects McGiveran to Presidency

At the Western Golf Assn. annual meeting, held Dec. 5 at Chicago, Stanley J. McGiveran, Inverness Club, Toledo, O., was elected president to succeed Gordon E. Kummer.

Vice presidents elected are: Cameron Eddy, Glen View (Ill.) Club; C. L. Miller, Orchard Lake (Mich.) CC; Roy W. Walholm, Indian Hill Club, Colorado Springs, Colo.; and Robert L. Walker, South Bend (Ind.) CC. Harold O. Moore, Exmoor CC, Highland Park, Ill., was elected treas. Hiram A. Lewis, Broadmoor CC, was elected sec. and James L. O'Keefe, Evanston (Ill.) GC was named general counsel.

Individual membership of the WGA, under the member "billing" campaign on bag tags reached 15,573 in 1952. When a man's taste runs to especially fine interests, he finds an immediate appeal in ULTRA HAIG woods, irons, and golf balls. Like a fine car or a choice briar pipe, they instill within you a real pride of ownership. They're available only through golf professionals, the grandest gentlemen I know.

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Walter Hagen Golf Equipment

"TERSAN" CONTROLS TUT FUELDE BROWN PATCH

with Economy, Safety and High Effectiveness"

Says T. M. Baumgartner Landscape Architect The Sea Island Co., Georgia

> Here Golf Course Superintendent Marion McKendree examines the 8th green

"We use both "Tersan" and F-531 fungicides to get complete disease control through the year. As soon as rye grass is sown in our greens in October, we start spraying and continue through the winter and spring. We use Du Pont F-531 for control of dollar spot and "Tersan" for control of large brown patch and other fungous diseases. Since we get perfect control, it's almost needless to say we like these two products."

This picture story is another in a series of "experience reports" from well-known golf courses, coast to coast

Sea Island's almost semitropical climate favors spread of turf fungous diseases. But regular spraying with "Tersan" and F-531 keeps the greens in top condition for play winter and summer.

Handy 3-lb. package of "Tersan" 75 saves measuring from bulk. It's easier to handle, cleaner, more accurate, stays in suspension better. The green color blends with the turf. Get "Tersan" 75 from your golf supply house.

For the best control of dollar spot, Sea Island uses F-531 fungicide on the grounds of the Cloister Hotel and other lawns as well as on golf greens. It controls copper spot and pink patch as well. For a mercurial fungicide, use Du Pont Special "Semesan."

"Tersan" and "Semesan" are registered trademarks of E. I. du Pont de Nemours & Co. (Inc.)



January, 1953

Course Supts. Set Program for Atlantic City, Feb. 8-13

Golf Course Supterintendents' Assn. of America will hold its 24th turf conference at Ambassador Hotel, Atlantic City, N. J., Feb. 8-13. With the program of course maintenance papers and discussions there will be staged the usual exhibition of equipment and supplies.

This year the GCSA expects to continue its record of increasing attendance at its conventions. Superintendents from all parts of the U. S. and Canada will be present as the practical nature of the association's national meeting has plainly demonstrated its value to clubs whose men attend. At practically all of the first class courses and public golf operations now GCSA expense is regarded as a profitable item of the course maintenance budget.

Pres. Mal McLaren, Sec. Agar M. Brown and other officials of the GSCA have set up an excellent program. Arrangements have been made for entertaining wives of the conventioneers with events at Atlantic City and Philadelphia.

The conference program:

WEDNESDAY, FEBRUARY 11 MORNING SESSION

FRANK DINELLI, Chairman

Supt., Northmoor CC, Highland Park, Ill.

Opening of the Conference

Malcolm E. McLaren, Pres., GCSA, Cleveland, Ohio

Conference Keynote. "Research — Development — Application; What It Means To You"

Gilbert H. Ahlgren, Chmn., Farm Crops Dept., Rutgers University, New Brunswick, N. J.

Warm Season Grasses In Today's Turf

Dr. Fred V. Grau, Director, USGA Green Section, Beltsville, Md.

Cool Season Grasses In Today's Turf

Prof. H. B. Musser, Dept. of Agronomy. Penn State College, State College, Pa.

Operation Zoysia

Willis H. Glover, Supt., Fairfax CC, Fairfax, Va.

AFTERNOON SESSION

NORMAN C. JOHNSON, Chairman Supt., San Jose CC, Jacksonville, Fla. Fertilizing Turf Grasses. How Much — When — For What Reason?

L. R. Shields, Supt., Woodmont CC, Rockville, Md.

Nelson Monical, Supt., Portage CC, Akron, O.

Golf Course Records

Charles Schalestock, Supt., Farmington CC, Charlottesville, Va.

Clover Control on a Golf Course

Dr. John F. Cornman, New York State College of Agriculture, Ithica, N. Y.

Efficient Weed Control on Today's Golf Course

Prof. B. H. Grigsby, Dept. of Botany and Plant Pathology, Michigan State College, E. Lansing, Mich.

Summary of Day's Program

Charles K. Hallowell, Agricultural Extension Representative, Pa.

THURSDAY, FEBRUARY 12 MORNING SESSION

PAUL F. LEIX, Chairman

Supt., Allegheny CC, Sewickley, Pa.

What the Superintendent Has Done for Golf

Joseph C. Dey, Jr., Executive Director, United States Golf Association

Diseases of Turf Grasses and 1952 Fungicide Trials

Dr. Spencer H. Davis, Dept. of Plant Pathology, Rutgers University, New Brunswick, N. J.

Helminthosporium-Curvularia Blights of Turf and Their Cure

Dr. Frank L. Howard, Head Dept. of Plant Pathology-Entomology, University of Rhode Island, Kingston, R. I. Microorganisms — Cultivation in Con-

trol of Thatch in Turf

Dr. H. L. Starkey, Professor of Microbiology, Rutgers University, New Brunswick, N. J.

Dr. Ralph Engel, Asst. Extension Specialist in Turf Managaement, College of Agriculture, Rutgers University, New Brunswick, N. J.

Paul Weiss, Supt., Lehigh Valley CC, Allentown, Pa.

AFTERNOON SESSION

WILLIAM BERESFORD, Chairman Supt., Los Angeles CC, Los Angeles, Calif.

Golfdom