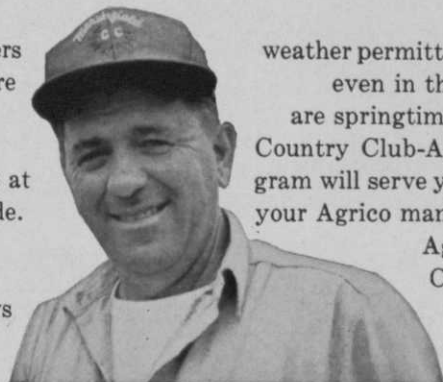




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weather permitting, and with Agrico, even in the Fall, our fairways are springtime green.” An Agrico Country Club-Agrinite Feeding Program will serve your course, too! Call your Agrico man or write: American Agricultural Chemical Co., New York, N.Y. or Agricultural Chemicals Ltd., Toronto 15, Ont.

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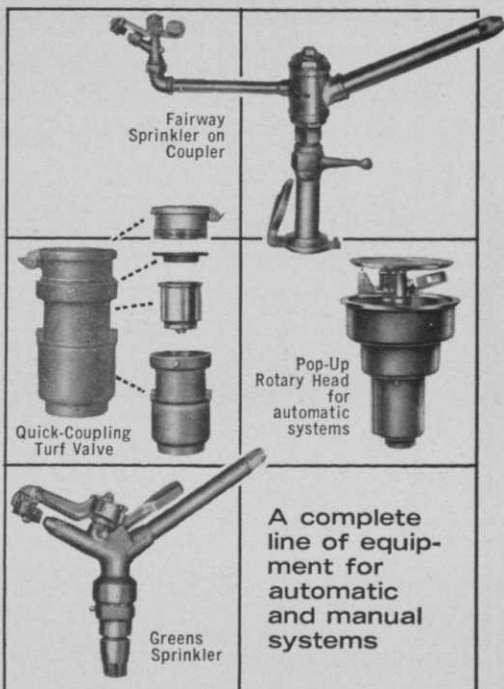
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THE SKINNER IRRIGATION COMPANY, 415 WATER ST., TROY, OHIO

plans \$200,000 improvement and expansion program including clubhouse remodeling . . . New resort in the Union, Ore., area will include course, air strip and heated pool . . . Claxton, Ga., is considering 9-hole muni . . . Perryville (Mo.) CC has opened 9-hole course . . . Membership deadline has been set for Van Zandt County (Tex.) Recreation Club . . . Tentative approval has been given for \$250,000 loan for Van Zandt recreation setup including \$80,000 allotted for course.

Los Angeles's old Roosevelt course is used as part of the new Greater Los Angeles zoo, but new Roosevelt layout has been completed in the city's Griffith Park . . . Cherry Hill GC in Amherst, Mass., designed by Howard Gibbs, is expected to be opened next summer . . . The new Tacoma (Wash.) G&CC clubhouse will be ready for this year's Christmas-season parties . . . Tacoma has been without a clubhouse since the old one burned in 1961 . . . Seward, Neb., hopes to have new 9-hole course open this fall.

Canyon Crest CC in Riverside, Calif.,

has course and clubhouse under construction . . . Madison, W. Va., is the site for the Riverview CC now under construction with an April 1, 1965, target date . . . Course at Amory (Miss.) GC is near completion . . . Eighteen-hole Charming-fare Links in Candia, N.H., opened late in June.

Construction contract has been signed for new course at Chicopee, Mass. . . . Eighteen holes are planned and contract covering 83 per cent of the work is for about \$150,000 . . . New course construction progressing at Nunda, N.Y., site of a 9-hole layout . . . The old Kinsman CC in Orland Park, Ill., has changed hands and is now called Eldorado CC . . . New management at Eldorado has planted over 3,000 trees, rebuilt greens and constructed a new clubhouse.

Dave Davis, pro at the VFW CC in Indiana, Pa., now has second nine in play . . . Cal Polseon, supt. at Aberdeen (S.D.), CC, expects new grass to be well enough established to permit play on the 18-hole course by the middle of this

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Nitroform is available in two easy-to-use forms: Blue Chip® granules for conventional spreading and Powder Blue* for liquid application. Both have the same slow-release, non-burning properties. There are other advantages to Nitroform. It doesn't leach away; it builds a nitrogen reserve; it is easy to handle; and it's odorless.

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DEFLOWERED BEFORE SEEDING TIME TO PREVENT CROSS POLLENIZATION

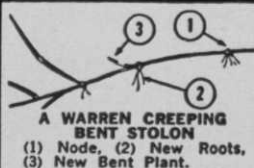
Field sterilization assures purity of strain — prevents *Poa Annua* — eliminates off-strains of Bent — kills weed seeds.

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month . . . Oswego (N.Y.) CC has purchased 70 acres for possible future expansion . . . The club now has nine holes and is planning expansion to 18.

Cincinnati, O., park officials are urging construction of second 9-hole course at Reeves Field . . . Nine-hole course is scheduled for Grafton, W. Va. . . . It was designed by the owner, Frank Kunst, and Dazzy Vance, pro at Bridgeport CC in Clarkesburg, W. Va. . . . The Erie GC in Erie, Pa., may relocate several holes in a hilly area of the course to facilitate construction of ski facilities . . . Chamber of Commerce in Weslaco, Tex., is studying possibilities of building a community course.

Front nine opened early last month at Benjamin W. Hawes GC in Owensboro, Ky. . . . Blackhawk GC in Janesville, Wis., will have nine holes plus clubhouse . . . Sarasota, Fla., recently erected a plaque commemorating Gilespie Golf Course which existed until 1925 and is said to have been in existence in 1886 . . . Press reception was being held at the new Forest Lakes CC, also in Sara-

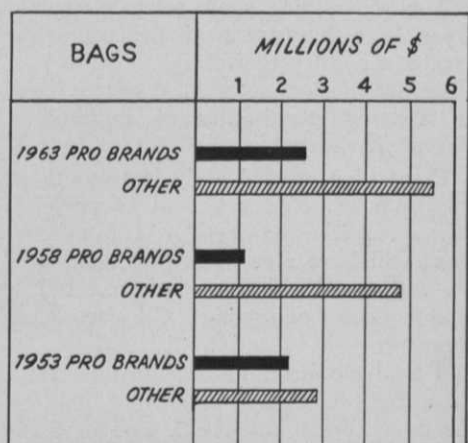
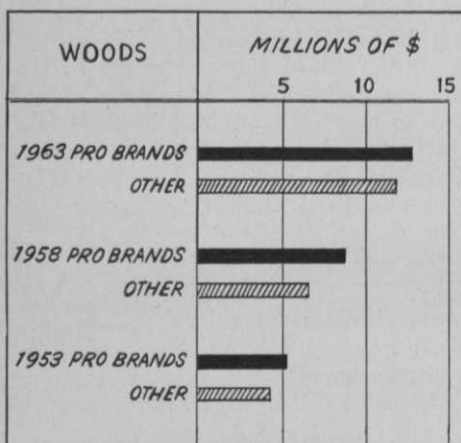
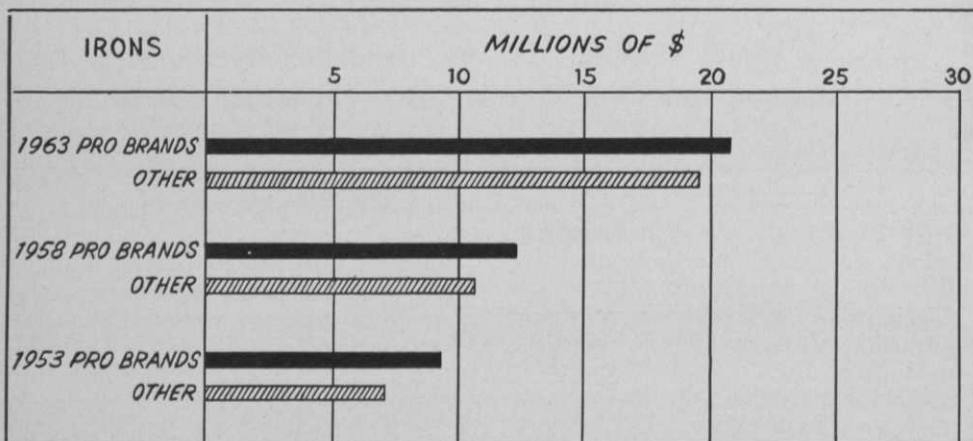
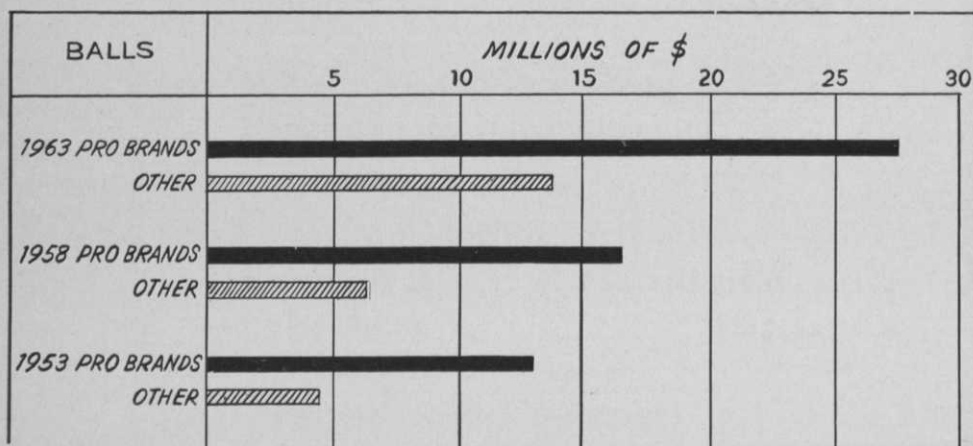
sota, while Gilespie ceremony was going on.

Portland, Me., is considering bidding for federal aid under open space land preservation program to expand Riverside Muni . . . Velleaire GC in North Royalton, O., has 18 holes and clubhouse under construction . . . Harold Paddock, Sr., is the architect for Velleaire . . . Interest is being shown in 200 acres located in Cairo, N.Y., and owned by Greene County, as possible course site . . . Indian Hills GC in Corning, N.Y., opened during the 4th of July weekend . . . Upper Brookville, N.Y., has given zoning okay to new club on Mill River Road, Chestnut Ridge, an 18-hole course in Blairsville, Pa., designed by James Harrison and Fred Garbin, opened in late June.

The new Green Meadows GC in Mt. Holly, N.C., opened nine holes early in July and plans immediate expansion to 18 . . . Fairway Farms, three miles east of Lancaster, Pa., is scheduled to be ready for play this fall . . . Proposed 18-

(Continued on page 75)

10 Years of Equipment Sales



Percentage Holds Steady
in 1963, Says AGMA

Golf Goods Accounts for 44 Per Cent of Sports Equipment Sales

Golf again is far ahead of any other sport in equipment sales as reported in the Athletics Goods Manufacturers Association census report for 1963.

On the basis of manufacturers' selling prices, including federal excise tax, golf equipment accounted for \$119,352,933 of a total of \$251,497,795.

Other classifications reported these sales:

Baseball and softball equipment	\$36,912,339
Athletic shoes	33,154,647
Inflated goods	21,819,211
Athletic clothing	9,989,139
Tennis, badminton and related equipment	9,969,736
Helmets and pads	6,540,702
Bowling bags	535,819
Boxing gloves	230,431
Miscellaneous	12,992,838

The overall picture shows golf goods accounting for 44 per cent of the total, about the same as in 1962 when golf equipment sales amounted to \$110,361,324 of the reporting sports total of \$241,563,826.

Average Club Value — \$6.51

Golf's 1963 total sales were 10,000,279 clubs (7,140,396 irons and 2,859,883 woods) at a value of \$65,133,965 for an average value of \$6.51 at the manufacturers' price, plus excise. This volume

indicates that a golfer buys an average of 1½ clubs a year.

Ball sales were reported as 5,694,329 dozen at an average price of \$7.18 per dozen (manufacturers' price). This means that a golfer buys slightly less than a dozen balls a year.

The figures reported in the AGMA census probably account for about 95 per cent of the clubs manufactured and possibly 80 per cent of the balls. A good deal of unreported equipment production is in lower price brackets.

There Is A Difference

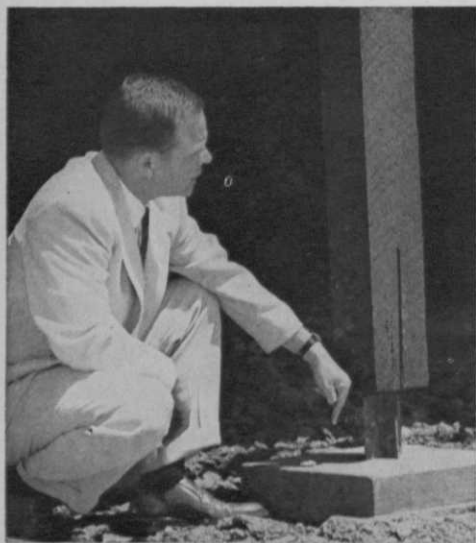
Reference in the charts on page 26 to "pro brands" does not necessarily mean brands bearing the names of different professionals, but pro-quality merchandise. Several brands that bear the names of professionals are retailed through sporting good stores, discount houses, etc. Ninety per cent of quality golf goods is sold through pro shops, according to estimates.

Pro quality ball sales increased slightly in percentage over the previous year. In 1963, pro type balls with an average manufacturers' selling price of \$9.18 a dozen accounted for sales of 2,965,014 dozen of 5,694,329 dozen. There were 462,184 dozen more balls sold in 1963 than in 1962.

Making allowance for a price differential in pro-quality woods and a change in
(Continued on page 58)



Reverse Stress



Architect Fred Hummel explains that posts are tied down by concrete bases because pull is upward and not downward. (Above) Saticoy clubhouse, situated on a hill, is seen from sand beyond with green.

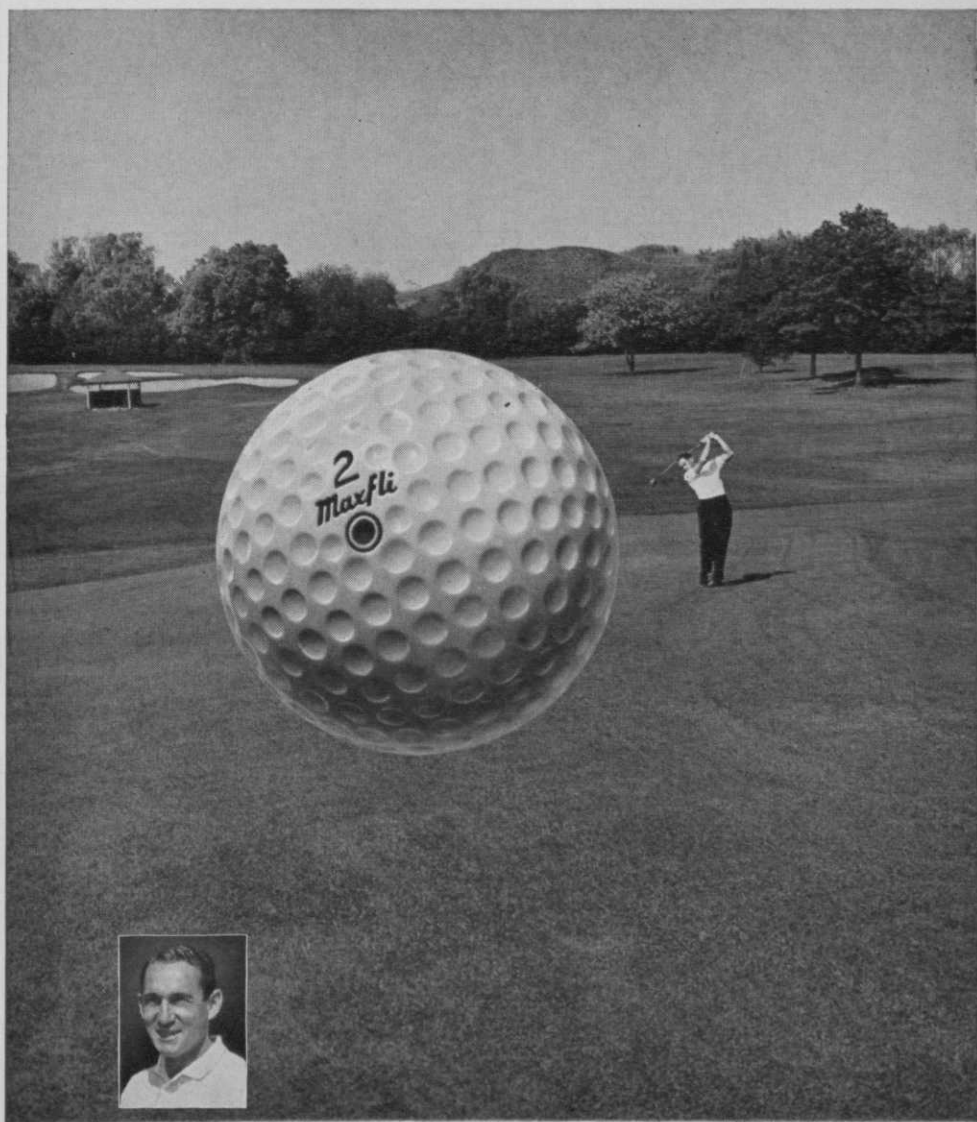
A California architect has used a different kind of a twist in the design of Saticoy CC's clubhouse . . . It keeps the weight off the walls, has eased the strain on building costs

By M. MORRIS MOORE

Innovations in clubhouse construction at the new Saticoy Country Club, near Ventura, Calif., have resulted in savings estimated at about \$50,000 in construction costs and perhaps even larger amounts in maintenance, according to Joseph G. Seward, club president.

The split-level clubhouse, completed in June, was built for \$200,000, or \$50,000 under original estimates. Total cost is about \$13 per square foot.

Architect Fred Hummel, of Ventura, is the bright young man behind the dra-



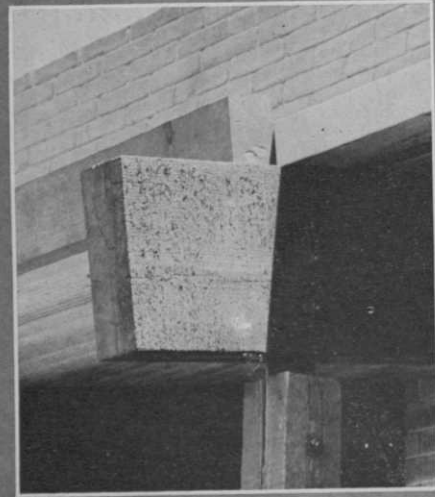
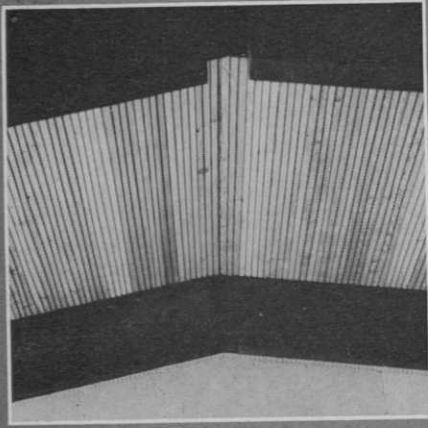
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*Dow Finsterwald, Dunlop Golf Advisory Staff member.



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matic savings. His innovations are in his words, "simply new applications of well known principles."

Reverse stress is the major innovation. Results of the reverse stress show in numerous places, and unless explained, look to the uninitiate like heavy beams and pillars resting on thin strips of steel.

Tie Units Together

Therein lies Hummel's method. The beams and pillars do not rest on the steel plates, and are not being held up by them. They are connected to each other by the plates and are held together by them. But the plates do not bear downward pressure. Rather they, in effect, keep the structural units from flying apart.

"This method makes the building stronger and more rigid," Hummel says, "and makes it easier to construct."

Hummel estimates that this method saved approximately \$10,000 of the original \$250,000 estimate, and cut construction time by two to three months.

Hummel explains "reverse stress" this way: "Most buildings rest their roof and ceiling weight on the outside walls, or on pillars. But in this building the walls serve as fulcrum points, and the pillars hold the roof beams down, not up."

Outer Ends Lifted

Hummel's unusual construction method calls for the roof beams to be joined at the center of the span with steel plates he designed for the purpose. There are no tie rods, no trusses, no ridge beams. The weight of the beams, plus the weight of the roof, pushes downward and the outside walls act as fulcrum points, tending to lift the outer ends upward — hence

(Continued on page 66)

Grooved planking in ceiling of main ballroom at Saticoy CC (top) gives accoustical effect, provides insulation and doesn't have to be finished. Architect says use of this type of ceiling saved several thousand dollars in construction costs. (Center) Board on end of roof, at left, forms an "L" with roof. Metal gutter is nailed on top of the roof and against end board, as seen in photo. (Bottom) Outside pillars hold down overhead beams. If they supported roof load they would crumble. Beam doesn't meet post but is joined by a steel plate. Architect claims these features make clubhouse earthquake-proof.