Power-Bilts for '66

... Clubs with a purpose!

The new Power-Bilts for '66 have been designed with one purpose in mind — Easier Playability! Through Center Balance Design the player will get more accuracy and greater distance, because the center of gravity and the center of percussion are located directly in the center of the club face. New "boxed toes" on irons takes wasted weight from the toe and puts it in the back where it will do the most good. These features and many more, plus a new clean, sculptured look, make Power-Bilts for '66 the most exciting new clubs we have ever introduced. Stock them and display them—for when they are there to compare—they sell!
water by the plant by evapotranspiration—loss by evaporation and by transpiration of water by the grass plant. Nine-tenths of the water lost by a grass plant is lost upwards into the air through the stomatic openings of the leaves. Most of this loss occurs by day and the rate will vary by climate.

When talk got around to disease and water practices relationships, the panel pointed out that fungi need “free water” in order to penetrate the grass plant. In a dry region, there will be less disease; in a humid region, more disease.

It was at this point that a question was raised from the floor about the possibility of introducing fungi to the grass via the irrigation system—i.e. the fungi were in the water supply. (From the unhappy tone of the questioner, it seemed he had had a bitter experience.)

Mr. Holmes answered this by saying that despite the fact that water can be polluted by fungus spores, it will not materially increase the number of fungi that are already right there in the grass. Tests show, he said, that practically all fungus spores concerned in outbreaks of disease are already lying on the grass plant. Very few could be introduced by water from the irrigation system. While water polluted with fungus spores could do some damage, it could not be held responsible for outbreaks of disease solely on its own account.

The gentleman from the floor rose again to observe that even if the grass was covered with fungus spores, all he knew was that something triggered the outbreak of disease. If it wasn’t his polluted water supply, then what did the damage?

(Due to the demands of time this topic had to be dropped.)

The Panel then discussed fertilization and water requirements. One guide, they said, was that tests show the transpiration rate decreases with proper fertilization. As a result, grass can better withstand drought.

The session ended with a discussion of irrigation systems in New England. There, it was pointed out, they have bentgrass-fescue, an irrigation system is
Happiness is .... ..... "a sparkling clean ball on every tee"

Lewis Line

Golf Ball WASHERS

Easiest to use...
Easiest to maintain...
and does the very
BEST JOB!

Precision built, they are backed with forty years of know-how but as up-to-date as tomorrow. Sizes and styles to suit every course, every budget — choices of bright colors and a host of accessories.

But, don't let price and appearance fool you... every Lewis Line washer is built to wash balls — cleaner, faster, with less fuss and no splash. Larger water capacities, easily accessible clean-out drains, and long-wearing brushes that can be replaced right on the tee... these are washers that assure year-in, year-out satisfaction with an absolute minimum of maintenance.

See your golf dealer or write for brochure and prices today. CONTAINER DEVELOPMENT CORP., 41 Monroe St., Watertown, Wis. 53094

GF-52

PRICES TO SUIT EVERY BUDGET...
Best uniform spreading at low maintenance cost! EZEE FLOW

Model 111 Spinner Spreader — 2-ton capacity. Spreads granular, semi-granular or pelleted materials accurately and uniformly in patterns up to 56 feet wide! Handles all fertilizers, seed, dry chemicals, rock salt, sand, etc. Can be reduced to 6 to 8 foot wide patterns for special spreading. Patented metering device and PTO-driven auger delivers the exact amount of materials to the spinner to insure the most accurate uniform spread regardless of ground speed.

Easy operation — Spread rate table gives dial settings for width of spread and lbs. per acre. After the regulator dial is set for the desired spread, the operator merely opens and closes the shutter.

Low-cost maintenance — Rugged construction and fewer moving parts give you long, dependable service—virtually eliminate costly downtime!

Big wheels on a single axle makes maneuvering easy—gives excellent flotation and prevents ruts and “tearing.”

Special... for turfed areas

EZEE FLOW Olympia line
Two models (5’ and 8’ wide) with 3” port spacing and adjustable scatterboards for “no streak” turf feeding.

PRODUCTS OF Avco CORPORATION
For complete information, write to EZEE FLOW Division, Department 11, 3428 North Harlem Avenue, Chicago, Illinois 60634.

EZEE FLOW

For more information circle number 134 on card

WATER STILL NEWS
Continued from page 72

put in, and soon the members of the greens committee are demanding that the superintendent water constantly. When he says no, this is not right for the grass, they reply, we’ll fire you! The superintendent often has no alternative but to overwater—or lose his job! Ideally, bentgrass should only be watered every three days or so. However, members are demanding overwatering to get plush fairways at any cost, even at the risk of encouraging annual bluegrass.

The third item on the morning’s agenda was a talk by Mr. Harry Day, Woodway CC, Darien, Conn., on “Sources of Supply.”

With the drought in the Northeast, Day said, many clubs in that area have had to make a re-evaluation of their source of water supply. Many natural sources of water supply like lakes or streams have become contaminated by inadequately treated sewage, and clubs have had to cast about for other sources of supply.

The minimum requirement in the Northeast is around one inch of water weekly. Roughly speaking, Day said, you need around 18 million gallons per season—based on around 40 acres of greens, tees and fairways to be watered.

The main sources of supply available for golf course use were, he said: Rainfall; municipal sources; wells; small streams running through the course; sewage effluents, and lakes.

The problem with municipal water, Day observed, was this can be cut off just when you need it. Small streams are attractive, but they tend to dry up in summer. Sometimes you can dam them up and store the water. However, you must investigate the question of water rights first. Sewage effluents are a possible source, but you should thoroughly investigate the methods of treatment being used to ensure that no pollutants would be introduced.

At Mr. Day’s club they solved the problem of water supply by building a lake. He described how this was done—from the drawing of the topographical map necessary to get a permit to the finished product. Along the way he

Continued on page 76
Use West Point equipment for one-man maintenance of turf. Save time and manpower with minimum disturbance to the golfer.

One man does it fast. Use the MVG-3 Master Verti-Groove and TCM-3 Catch-Master to Verti-Groove or overseed fairways in one operation. Save time and manpower. Give the golfer more playing time.

One man does it fast. Use the MC-5 Vertifier with new Lifting Device and rubber Flexi-pads to core and clean greens in one operation with no disturbance to the golfer.

One man does it fast. Use the 3-gang PD-1 Power Drag to reduce green maintenance time. Save manpower. Mat greens three times as fast.

For information and the name of your West Point distributor write

WEST POINT PRODUCTS CORP.  WEST POINT, PA.

For more information circle number 189 on card
punctuated his talk with many useful tips. For instance, care must be taken that no seepage occurs. If the bed of the proposed lake is not naturally impervious, then steps such as lining the bottom with polyethylene material must be taken. Or if the proposed site for the lake cuts into a hill, take the excavated dirt and build up the downhill side of the lake, thus increasing capacity.

At Day's club, they were able to do the whole job using just their own grounds crew. Although this saves the cost of using an outside contractor, he cautioned that at some clubs this could lead to neglect of regular course maintenance.

To illustrate his talk, Mr. Day showed slides that for practicality and sheer beauty would be hard to beat.

The last morning session was a Panel discussion entitled "Types of system—Economics." Alexander M. Radko, Eastern Director, USGA Green Section was Moderator, with Charles McCrea, Green Acres CC, Lawrenceville, N.J., and Ed Hunter, Sprinkler Irrigation Association, Riverside, Calif., on the Panel.

To kick off the discussion, the panel first analysed an actual quotation for installation of a center line manual system or an automatic irrigation system dated January 1966. (To be analyzed in April, GOLFDOM.) Interestingly enough, the price differential is only $26,000.

The panel pointed out that price alone should never be the sole consideration. For instance, in some parts of the country galvanized iron has only a life expectancy of three-four years, so plastic pipe in this case would actually be a better choice.

If you are undecided what system to install, said the panel, then it's best to pick a manual system. Later, you can always do what is necessary to convert it to a semi-automatic or automatic system, if this seems desirable.

Before deciding on a system, there are several important areas the club must probe: The amount of water to be supplied in inches per week; the total area to be covered; the hours available for watering; investigation of the different

Continued on page 78
ROSEMAN MOWER CORP. ANNOUNCES THEIR
PRODUCING THE WORLD'S FINEST
MOWING EQUIPMENT FOR GOLF COURSES...
PARKS...SCHOOLS...COLLEGES...
MEMORIAL CEMETERIES...INSTITUTIONAL
LAWNS and INDUSTRIAL TURF AREAS

FROM THIS IN 1916...

TO THIS IN 1966

ROUGH OR FORMAL CUT
Hollow-Roller drive models are available for mowing lawns, parks and golf course fairways where finest possible turf is desired. Hi-Cut, laminated puncture-proof tired models are available to mow taller growths and to improve appearance of meadow areas, toll road medians, airfields and similar turfed areas. Tractor-mounted, hydraulic lift models are available for mowing widely scattered areas. Available in 3, 5, 7 and 9 gangs.
TIME SAVERS

Stewart Sandwich Service

The low-cost way to serve a tempting variety of 30 toasted sandwiches profitably.

Halfway house a bottleneck? Pool a problem? Speed up service with Stewart Sandwiches. They toast fast—12 sandwiches in less than 4 minutes—with no shrinkage or loss of flavor. Each is hermetically sealed to stay fresh, crisp, delicious. Better yet! Stewart sandwiches make friends fast. The taste never varies. They’re crammed with the hot, hearty flavor that have made Stewart Sandwiches overwhelming favorites from coast to coast.

Inquire today about Stewart’s FREE EQUIPMENT LOAN AND WIDE SANDWICH VARIETY NO WASTE OR SPOILAGE SCHEDULED DELIVERIES LOWER OPERATING COSTS GUARANTEED PROFITS

Stewart Sandwich service is available to you through your local Stewart Commissary. Check the phone book, or for more information, write . . .

STEWART IN-FRA-RED, INC.
P.O. Box 207, Fontana, Wisconsin 53125

Stewart Sandwiches—the best taste you ever toasted.

For more information circle number 106 on card

WATER STILL NEWS

Continued from page 76

types of system available; the water distribution efficiency of the system, and the expected life of components, under local conditions.

Hunter pointed out that if members will allow sprinklers to operate during play, the period for watering will be longer than if they demand that watering be only done in non-play hours. This demand can sometimes reduce watering time to as little as seven hours per day.

Labor costs should not be the sole criterion for installing a fully automatic system, said McCrea. Night-time watering jobs are difficult to fill. The cost of maintaining a crew is often more than the pure labor cost alone. Much supervision is needed and this cost should not be overlooked.

Many clubs may be wondering whether to install an irrigation system with their own grounds crew or use an outside contractor. You have to remember, said Hunter, that the cost of the components of a system is much more than the cost of labor to install it.

A good contractor can buy components at a better price than can a golf club. He can install the system at a profit, and do it at a lower cost than can a club on its own. Don’t be misled, Hunter cautioned, by contractors who say they can do the job at a very low price. It’s best to limit bids to those few contractors who can do the job properly.

A good tip from McCrea was that the greens chairman should be allocated expenses expressly for the purpose of travelling to see irrigation systems installed at other clubs. He can then thoroughly brief himself on the problems he’s likely to encounter, and avoid some of the mistakes they made at all phases in the operation.

The panel wound up its discussion with this advice: Don’t try to be a system designer. Concern yourself with investigating and ascertaining what you expect out of the system—not what to put in. Leave that to designer.

After lunch came the presentation of the USGA Green Section Award. This year, H. Burton Musser was honored, being presented with the award by Continued on page 80
How are Philadelphia spikeproof carpets doing at the East Lake Country Club, Atlanta?

Great, report club officials, and that goes for the locker room and grill room in addition to the pro shop shown above, all heavily walked on with spikes. These hardy, specially engineered carpets are still beautiful, warm and luxurious—and they have been down for as long as 15 years! Specify Philadelphia carpets (custom woven in your colors) for wherever spikes are worn in your club. They lead in long-range economy and ease of maintenance, provide maximum sound absorbency and protection against falls. Select from one of the industry’s most extensive design libraries.

Philadelphia produces fine woven and tufted commercial carpets in every proven fiber.

Mail coupon for free carpet sample

Philadelphia Carpet Co. (Commercial Division)
Allegheny Ave. and C St., Philadelphia, Pa. 19134

Please send me a free sample of your spikeproof carpet. No obligation, of course.

Name ________________________________
Club ________________________________
Address ______________________________
City, State ____________________________

For more information circle number 178 on card
Most profitable famous-pro jackets!

DOW FINSTERWALD & MICKEY WRIGHT
GOLF JACKETS

Send for our complete brochure showing additional styles for men and women.


Men’s Sizes 34 to 46, Retails $14.95
Ladies’ Sizes 8 to 20, Retails $14.95

NEW PLANT PROVIDES FOR GREATER IN-STOCK SERVICE
RUBIN GRAIS & SONS
400 N. Artesian Ave. • Chicago, Ill. 60612

For more information circle number 198 on card

WATER STILL NEWS
Continued from page 78

Clarence W. Benedict, of Greenwich, Conn., the USGA President, and Henry H. Russell, of Miami, Fla.

Prof. Musser, who retired in 1959 as Professor of Agronomy in the School of Agriculture of the Pennsylvania State University in 1959, was responsible for developing Pencross bentgrass, Pennlawn fescue and Penngift crown vetch.

Following the presentation, an interesting film on water movement in soils was shown. Layers of soil of various types were shown sandwiched between plates of glass. By means of time-lapse photography you could see how water moves through some types of soil faster than others. The film was prepared by Dr. Walter Gardner, Washington State University.

Next on the afternoon agenda came a panel discussion on “Comparison of types of system—Operation.” William H. Bengeyfield, Western Director, USGA Green Section, was Moderator on this one, with the panel being; Herb Clark, Sprinkler Irrigation Association, Director, Fresno, Calif.; Carlyle Regele, Sprinkler Irrigation Association, Irrigation Engineer, Peoria, Ill., and Joe Lee, Golf Course Architect, Delray Beach, Fla.

Clark pointed out that a manual system is fine—as long as you have a good man on your greens staff who understands its operation. But it’s difficult to do the job well otherwise. The reason why automatic systems are becoming so popular is the problem of getting competent labor. Another advantage of an automatic system is that it turns on the water the instant you want—manual systems take more than an hour to get going.

Joe Lee raised the question of waterlogged traps. How could this problem be alleviated? By a new sprinkler head? It’s possible, replied Clark, that the irrigation industry would design a special sprinkler head, if the demand was high enough. However, he added that usually good drainage in the trap would take care of the problem. Regele concurred in this opinion.

In answer to a question from the floor, Herb Clark discussed a few things about