4.5 times as much weight concentrated in the exact center of the First Flight ball is exactly the same basic aerodynamic principle that gives aircraft and missiles stability in flight.
<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>New England &amp; East</th>
<th>Midwest</th>
<th>South &amp; Southwest</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-holes weekends &amp; holidays</td>
<td>$3.40</td>
<td>$3.92</td>
<td>$3.75</td>
<td>3.06</td>
<td>$3.25</td>
</tr>
<tr>
<td>18-holes weekdays</td>
<td>2.54</td>
<td>2.33</td>
<td>2.75</td>
<td>2.56</td>
<td>2.38</td>
</tr>
<tr>
<td>9-holes weekends &amp; holidays†</td>
<td>2.06</td>
<td>X.XX</td>
<td>2.65</td>
<td>1.75</td>
<td>1.44</td>
</tr>
<tr>
<td>9-holes weekdays†</td>
<td>1.53</td>
<td>X.XX</td>
<td>1.75</td>
<td>1.25</td>
<td>1.50</td>
</tr>
<tr>
<td><strong>Car Rental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-holes*</td>
<td>6.22</td>
<td>7.50</td>
<td>6.16</td>
<td>6.14</td>
<td>5.66</td>
</tr>
<tr>
<td>9-holes*</td>
<td>3.50</td>
<td>4.50</td>
<td>3.50</td>
<td>3.29</td>
<td>3.33</td>
</tr>
<tr>
<td>Cart Rental*</td>
<td>.54</td>
<td>.56</td>
<td>.50</td>
<td>.53</td>
<td>.54</td>
</tr>
<tr>
<td><strong>Storage Rates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.50</td>
<td>21.50</td>
<td>17.50</td>
<td>18.50</td>
<td>15.00</td>
</tr>
<tr>
<td>Percentage of courses that have increased rates since 1960</td>
<td>66%</td>
<td>66%</td>
<td>50%</td>
<td>75%</td>
<td>75%</td>
</tr>
</tbody>
</table>

†One out of three courses has 9-hole rates.  *At courses providing these services.
To light fairways...
(like this one at Colonial Palms Golf Course, Miami, Florida)

To light greens...
(like this one at Brookside Golf Course, Roanoke, Virginia)

To light driving ranges...
(like this one at Romdon Estates, Ltd., Toronto, Canada)

Wide-Lite floodlights give better light for less money!

MAKE US PROVE IT
SEND COUPON

WIDE-LITE CORPORATION
A Division of Esquire, Inc.
In Canada: Wakefield Lighting Limited

WIDE-LITE CORPORATION
4114 Gulf Freeway • Houston, Texas
Send more golf lighting information. No obligation, of course.

NAME
ORGANIZATION
ADDRESS
CITY_________________________ ZONE _______ STATE__________________

July, 1964
How Can You Manage Turf If You Don’t Play Golf?

Not long ago during lunch with Byron Nelson and John Henry at Brook Hollow CC in Dallas the subject of “golfing superintendents” was discussed. Without hesitation or qualification, Byron stated that every supt. should play golf for the simple reason that he will better know how to maintain the course for the golfers. Proof of this can be found at Brook Hollow where John Henry keeps an immaculate course with the turf groomed to please the players. It is no accident that John’s score hangs around the low 70’s and has been known to go even lower. Club members often ask supts. to play in their foursomes — a high compliment. Does anyone know a better way to learn player reactions to turf playing quality?

Encouraged to Play

There are many courses that are groomed to perfection by golfing supts., but there are not enough. We cite this one recent experience as an example. The situation has the complete approval of one of golf’s greats. I had discussed this with Byron in Minneapolis during the Amateur Championship in 1952 and had actively promoted the idea during my term as director of the USGA green section. The GCSA and affiliated chapters encourage supts. to play golf through regular meetings and tournaments.

Too Few Play

Still there are too few who play the game regularly and well. There has been a regrettable tendency to think (and say), “How can he do his work when he is out there playing golf?” Clubs should insist that one or two games a week with the pro, green chairman and a member is part of the job for which the supt. receives a salary. With a good foreman and a competent crew, work will be done while the supt. is playing golf.

The time may not be far off when a turf student, in order to graduate in turfgrass management, will be required to develop proficiency in golf just as he now must pass technical subjects. Truly, he can not qualify as a turf manager unless he knows the quality of turf desired by golfers. Grass can be grown without too much difficulty. Grooming grass into high-quality playing turf, pleasing to the players, is the highest art in the profession.

Testing Some Theories

We have experienced difficulties between golf and turf management that would have been ludicrous had they not been so tragic. One had to do with bent greens and Bermuda fairways. The complaint was that, in spite of heavy watering, greens would not hold a shot. The bent grass was suffering from too much water as a result. I was playing low-handicap golf then so, to test a theory,
these jobs have a common saving factor:

**Rugged air-cooled WISCONSINS**

Engines are engines — until you put them to work. It is at this crucial point that rugged air-cooled Wisconsins demonstrate their dependability on the toughest turf maintenance jobs.

The reason is quality construction. All Wisconsins — 3 to 60.5 hp — incorporate features for long life found in no other comparable engines. These include: Forged-steel crankshaft and connecting rods; tapered roller main bearings that never require servicing; pistons with chromed top compression ring; Stellite exhaust valves and inserts plus valve rotators that outlast ordinary valves up to five times. The results: Dependable power for the toughest jobs at lowest power cost.

Save time and money with equipment powered by rugged air-cooled Wisconsin Engines. Send for Engine Bulletin S-324. Write Dept. P-34.

**WISCONSIN MOTOR CORPORATION**

MILWAUKEE, WISCONSIN 53246

World's Largest Builder of Heavy-Duty Air-Cooled Engines — 3 to 60.5 hp
Arsenic: Symbol As — It belongs to the “Nitrogen Family,” along with phosphorus, antimony and bismuth. It is widely distributed as small percentages of sulfide ores of many metals. Most As in U. S. and Canada is a by-product of smelting ores of copper and lead. Highly-colored sulfides have been used as pigments since earliest times.

Lead alloyed with As makes harder, rounder shot. As and H can form arsine, a very poisonous gas with a garlic-like odor.

Arsenious oxide (arsenic trioxide) is the best known compound — often called white arsenic. It has a sweetish taste and, although extremely poisonous, people can acquire tolerance to it. Mountain climbers in Syria are “arsenic eaters.” To gain endurance, they ingest enough arsenic in a day to kill an ordinary person.

As does not accumulate in the body. Skin troubles can result from using dry arsenic mixtures prepared for insecticides and herbicides (its greatest uses). Arsenic in poison baits long was the only way to control many insects. Minute traces of As can be detected in materials by Marsh’s test.

It is useful for decolorizing glass. Many complex As compounds are used in medicine, one of which is salvarsan.

Arseinite of soda was used to kill chickweed at Merion Cricket Club as reported in July 1921.

Paris green was familiar to every farm boy who had to help fight potato bugs.

In 1926, Leach and Lipp, in New Jersey, reported arsenate of lead to be successfully controlling beetle grubs in soil. It is useful for reducing poa annua populations in putting greens.

High phosphorus levels in soils render arsenic relatively ineffective. One can substitute for the other in many chemical reactions.

I hit a number of balls to greens from 80 yards out. Sure enough, they wouldn’t hold but the answer was in the fairway grass, not the greens.

The non-golfing superintendent, to keep the fairways “lookin’ purty,” kept the thick Bermuda cut at 1½ inches. The ball sat on top of a “mattress” so that no one could impart control to the ball with the club face. The “balloon ball” floated to the green and kept right on rolling off the back. By lowering the fairway mowers to ¾ inch, we gave controlled shots back to the golfers, the greens held better and were healthier with less water.

I used to walk and hit shots with Al Watrous and the late Horton Smith. One never forgets that their choice of a lie for a fairway shot was on a tight, close-cut piece of red fescue as next best to or on a par with close-cut, dense Bermuda. Most professional golfers agree that the worst fairway lie is in lush watered bent that is cut too high. Ray Gerber of Glen Oak, near Chicago, and I checked that out years ago when we used to advocate high cutting to “save the bluegrass” in mixed stands. After 15 or 20 8-iron shots to the green the area looked as though the hogs had been rooting in it. Fairway mowers started cutting closer from that time on.

Exposed Thatch

Q. We have C-1 and C-19 bent greens that are about four years old. There is no subsurface drainage. Rather heavy thatch prevented good water penetration so we aerified, verti-cut, mowed and applied fertilizer and hydrated lime, followed at once with water. The weather turned hot (near 90 degrees) and a few greens turned brown. Some said it was fertilizer burn but I am sure that it was not. (Maryland)

A. Fortunately I was able to make a firsthand inspection. You may be assured that there

(Continued on page 70)
Soften sun-baked greens with the RYAN SPIKEAIRE

The power disc spiker with exclusive "Touch Control" action

You'll do up to 1/3rd less watering . . . have greener, better-playing greens . . . when you keep your greens well aerated with the Ryan Spikeaire during hot, dry weather. The Spikeaire cuts through the thick, hard crust that forms on the soil surface, making tiny openings that relieve the surface compaction and let water soak directly into the root zone instead of evaporating or running off on the surface. The Spikeaire covers up to 24,000 sq. ft. per hour, transports at 3 mph on permanently attached wheels. A touch control trigger automatically raises or lowers the reel . . . and differential action on the rear wheels makes turning easy. Spiking is deep (2 1/2" max.) and thorough—there are 14 spiking discs mounted less than 2" apart on the reel, and a choice of 8 or 13 spikes on each disc.

See how Ryan units team up to do more jobs: To get maximum results from aerating, follow it up with uniformly distributed applications of top dressing, turf builder or fertilizer. The big capacity self-propelled Ryan Spread-Rite handles all these materials . . . exclusive "live action" hopper feeds them evenly, damp or dry, over a full 39" swath. See your Ryan distributor or write:

Ryan EQUIPMENT COMPANY
2055 WHITE BEAR AVE., ST. PAUL, MINN., 55109

Manufacturers of WORLD FAMOUS turf equipment

AERATORS, RENOVATORS, VERTICAL MOWERS, SPREADERS, ROLLERS, AND SOD CUTTERS
Stockbridge Puts In Its Claim—Fourth Oldest On Original Site

By ED TOOLE

One of the oldest in the United States . . . that is the way the Stockbridge (Mass.) Golf Club has oft been described! How old? . . . That is a question repeated many times by modern knights of the fairways. And now added interest in the question has been generated what with all the national publicity over claims and counter claims as to which club is the oldest in the country — Dorset-1886, Foxburg-1887, St. Andrews-1888, Middlesboro-1889!

John Dakin, president of the Stockbridge Golf Club, makes the claim that this South Berkshire layout is about the fourth oldest golf club in the United States which is still located on its original site!

Founded in 1895, Stockbridge is approaching its 70th golfing season. Expanded from nine to 18 holes for the season of 1901, it was the first 18-hole layout in Berkshire County.

Woman Designs Course

While male golfers of the present era moan and groan about women golfers cluttering up the fairways, it is not only fair but highly interesting to note that one of the fairer sex. Katherine di Pollone, was the first individual to lay out a course in Stockbridge. That was a year before the formation of the Stockbridge GC!

While the USGA held its first U.S. Amateur in October of 1895, it is noteworthy that Stockbridge wasn’t far behind with its Invitational Tournament — by only two years, as a matter of fact — in 1897! This big Invitational has continued to flourish and rates now as one of the great, great granddaddy tourneys with an uninterrupted history!

Also of interest is the established fact that the first Berkshire County Championship was inaugurated at Stockbridge 63 years ago and here also was founded the Allied Golf Clubs of Berkshire County. This unique organization came into being in 1904, making it also one of the oldest in the country.

And 45 years ago, a member of today’s board of Allied governors, Rossmond Sherwood, helped inaugurate the very first International Women’s golf matches in the British Isles, a forerunner of today’s Curtis Cup Matches!

It was on Sept. 26, 1895, that the Stockbridge GC was officially formed with Walter E. Nettleton as its first president. However, the previous year — 1894 — saw golf being played in the town on a 9-hole course laid out by Katherine di Pollone at her summer residence, “Bonny Brae”.

The spirit of competition was born quickly. At the meeting forming the club it was voted to hold the Ladies Club Tournament on Oct. 3 (1895) and the men’s championship on Oct. 4. Clubs used
Now, Jacobsen introduces the fastest, easiest, lowest-cost way to remove leaves, thatch and turf debris... automatic grooming with the new Jacobsen Turf Groomer!

Depending upon turf conditions, speeds up to 8 mph can be obtained. The Turf Groomer scarifies, sweeps up and removes all types of leaves and debris in one easy operation. For quick disposal, its 5-foot auger-blower system with guided, swivel discharge chute forward-loads a towing vehicle, loads trucks running along at either side, or back-loads trucks or the dump, Turf Trailer accessory shown above.

The Turf Groomer removes thatch more easily and economically, too. It employs a series of free-swinging, flail knives that slice through roots, runners and dead grass, and aerate the turf. They are located between its nylon brush vanes which immediately pick up and load the thatch and clippings into any type carrier.

The new 3-in-1 Jacobsen Turf Groomer now makes large area turf maintenance a simple, efficient, remote-control one-man operation for golf courses, parks, cemeteries, sod farms, and the grounds of schools, institutions, plants and military establishments. For full details, phone your Jacobsen Turf Equipment Distributor for a demonstration, or write today. Jacobsen Manufacturing Co., Dept. G-7 Racine, Wisconsin.
the most useful 18 horses you can own!

NEW! CUSHMAN TURF-TRUCKSTER®

the multi-purpose grounds maintenance vehicle for golf courses...developed and made by Cushman, world leader in golf course transportation!

This new Turf-Truckster has 18 hp OMC air-cooled engine with 6-speed dual-range drive which gives you the proper speed and power for every job on the turf. Equipped with a variable-speed fast-acting governor this Turf-Truckster responds instantly to any load change. Big 9.50 x 8 Terra Tires on the rear provide great lugging capacity and prevent damage to the turf. Optional power take-off can be used as auxiliary power source for operating accessory equipment such as compressors, generators, sprayers. Stellite valves and rotators insure long engine life.
CUSHMAN TURF-TRUCKSTER HELPS YOU DO ALL THESE JOBS FASTER AND CHEAPER:

SPRAYING. Built especially for spraying greens, this boom sprayer covers 16-foot wide strip thoroughly and evenly, is operated by Truckster engine through power take-off. Boom and spray, rig can be removed in minutes.

PULLING MOWERS. Turf-Truckster’s terrific lugging capacity gives it all the uses of a tractor. Big tires give plenty of traction, will not damage turf. Variable speed governor insures steady even pull with heavy loads.

NIGHT WATERING. Load the sprinkler heads into your big Cushman Truckster and start out. Big 9.50 x 8 tires allow Truckster to drive freely, even on wet fairways.

SPREADING FERTILIZER. Truckster’s power take-off operates this Cyclone spreader as well as many other power-operated tools. Spreads evenly, heavy or light as you wish.

CARRY GREENS MOWERS. Greens mowers fit easily into large pickup box. There’s no time lost between greens; just roll the mowers up into the Truckster bed and go on to the next green.

USE THIS COUPON TO GET COMPLETE INFORMATION

Cushman Motors,
924 N. 21st Lincoln, Nebraska

Please send me complete information about the Cushman Turf-Truckster.

Name ........................................
Address ....................................
City ............... State .............

SEE YOUR CUSHMAN DEALER FOR A FREE DEMONSTRATION OR WRITE DIRECT FOR COMPLETE INFORMATION!

CUSHMAN MOTORS
"the big name in little wheels"

924 NORTH 21ST STREET, LINCOLN, NEBRASKA • A DIVISION OF OUTBOARD MARINE CORP.
numbered but three — the cleek, lofter and putter! Interesting is the recorded fact that at the organizational meeting it was also voted to adopt the same constitution as was in use at Shinnecock Country Club on Long Island.

Modern day linksmen still play one of the original holes at Stockbridge. The current 16th was the original second and later the seventh before the course was lengthened to 18 holes.

**Annual Dues — $10**

The first mention of an annual tournament in the club’s records is found in 1897. Incorporation of the Stockbridge GC was voted in 1900 and Dr. Charles McBurney, internationally known surgeon, was named president to succeed Walter Nettleton. It was also voted to expand to 18 holes and the annual dues were raised from $5 to $10.

Books bearing the early minutes of the club’s board of governors’ meetings contain numerous clippings from the Springfield Republican. In fact, the Republican carried two column pictures of the Stockbridge course in April of 1901. The same edition made mention of fine courses also having been started in Pittsfield, Lenox and Great Barrington.

Gleaned from the early copies of the Republican is the fact that it was upon the return from a visit to the Richelieu in Murray Bay, Canada, that Joseph H. Choate Jr., son of the ambassador to Great Britain, laid out the first four holes for his new found golf hobby on his father’s summer estate, and additional holes on the adjoining Tuckerman property.

**First Invitational**

Five years after, the first invitational was inaugurated at Stockbridge — on Sept. 14, 1901 — the club held “the first county championship tournament — 36 holes of medal play”. And from the impetus of this was formed the Allied Golf Clubs in 1904 at the Stockbridge GC. Thence the championship became known as the Allied 36-Hole Championship of Berkshire County. The first titlist was W. R. Tuckerman of the host Stockbridge.
NEW MODELS . . .

LO-BLO
the AIR-BROOM®
save time, labor, money muscle!

New 4, 6, 8 and 10 HP Models

SEND FOR NEW ILLUSTRATED FOLDER AND PRICE LIST.

NEW SELF PROPELLED MODEL — 10 HP Kohler K-241 Engine, Rope Start. Forward and Reverse—variable speed from 0 to 3½ mph at constant engine speed. Dual Fans—Magnesium heat treated. 8 curved blades 13⅜" O.D.

Tires: Rear 14" O.D. x 4.40 wide—pneumatic. Front 6" x 2" zero pressure.


Have us arrange a demonstration: ATWATER-STRONG CO. ATWATER, OHIO (A.C. 216) 7-2344

Club. Incidentally, the first Allied president was Samuel Frothingham of Lenox, a member of the Stockbridge Club.

The first course records entered for the 18 hole Stockbridge course show Walter R. Tuckerman and Malcolm McBurney to have posted “fine 71s” for the amateur mark. The early professional record was that of Frank Peeble who scored a 67. Then, in June of 1914, John Cowan shot a record round of 33-32-65.

Records of note are an integral part of the Stockbridge history. For instance Miss Rosamond Sherwood, a current member of the board of governors, was a member of the first U.S. women’s team to inaugurate international play against the gals of the British Isles away back in 1920. This was a forerunner to the present Curtis Cup Matches. And on that memorable international tour, Miss Sherwood was the cause of much amazement around Newcastle in County Downs because of the fact that she had the unheard of large number of golf clubs in her bag—seven to be exact.

Field of 2,692 Competes for Public Links Title

The 39th USGA Public Links Championship will be held July 13-18 at the Francis A. Gross golf course in Minneapolis, Minn. A total of 2,692 golfers applied for entry in the 46 sectional qualifying rounds, played in June and which narrowed the field to 150. Eligible for entry were golfers who had been public course players since Jan. 1.

Included among 150 players qualified to compete in Minneapolis is last year’s winner, Bobby Lund of San Francisco. A 36-hole medal play will narrow the field to 64 in Minneapolis. Match play will begin on July 15-16. The semi-final and final, at 36 holes, will be played July 17 and 18.

A team championship is held concurrently with the 36 holes stroke play qualifying rounds. The winner is the team with the lowest total score for three players. Thirty teams competed last year. Toledo, O., with 443 won by three shots over Long Beach, Calif.
Seek to Head Off Invasion of Bugs, Control Disease

Long Island Supt. Enlists Clubs' Aid in Blight Fight

BY JOHN M. BRENNAN
Golf Writer, Long Island Press

While millions of curious folk from all parts of the world converge on the New York World's Fair on Flushing Meadow Park, the men who maintain the more than 100 golf courses that surround the extravaganza conceived by Bob Moses are expressing concern over the prospects of the invasion of bugs, pests and disease that annually plague Long Island courses.

The Long Island GCSA, headed by Jim Manka of Inwood CC, scene of Bobby Jones' first National Open triumph, is enlisting the help of top agronomists of Cornell University and others in the educational field to help head off the invasion.

"Long Island clubs are prepared to shell out more than six million dollars to maintain turf during 1964," said Manka in revealing a bold, realistic plan in which the clubs, both private and public, are participating in an all-out attack on the bugs and fungi that attack the courses.

Five Per Cent for Control

"Over five per cent of the total spent by clubs will be expended toward the prevention or control of turf diseases," Manka continued. "As the demand for high quality turfgrass from tee to green increases, so will the monetary funds budgeted for chemical usage. And, of course, with the building of another 20 new courses in our section, the amount will be greatly increased next year."

In order to underwrite the cost of a program, launched by the Agriculture Department, Nassau County Extension Service Association, with the full cooperation of allied interests, the LIGCSA is appealing to all clubs to raise combined a total of $5,000 annually for the next four years to initiate and continue this essential program.

It is obvious the clubs will be the essential benefactors of the program. The LIGCSA is asking each club for a donation of $50 for four years. Early responses to Manka's appeal have been most encouraging, he reports.

Manka has indicated that the project has the solid endorsement of all the district associations, including the pro, amateur, Senior and women's.

Professor M. B. Harrison of Cornell's plant pathology department is conducting the investigations relative to the cause and control of diseases of turf grass in the Long Island sector.

The funds, Manka pointed out, will be used to defray costs of an assistantship stipend, travel expenses, supplies and small equipment required for the research of turf diseases.

An annual report of progress will be submitted to all clubs participating. Results of the investigations under the grant will be available for publication by the New York State College of Agriculture.

Officers of the LIGCSA, in addition to Manka, include Mel Lucas, Piping Rock Club of Locust Valley, v-p; Ed Kuhn, IBM CC of Port Washington, secretary, and Maurice Spillane of Wheatley Hills GC of East Williston, treasurer. Directors are Larry King of Deepdale GC of Manhasset, Ben Zukosky of The Links Club of Manhasset and Henry Fabrizio of Peninsula GC of Massapequa.

Car Manufacturers Meet

The American Golf Car Manufacturers Association will hold its first annual meeting at the Drake Oakbrook, Oakbrook, Ill., July 21. Prospective members, car manufacturer and suppliers, not now members of the association have been invited to attend along with regular and associate members. Complete information about the meeting can be obtained from Harold K. Howe, executive secretary of the AGCMA, Walker Bldg., 734 15th st., N.W., Washington, D.C. 20005. A golf tournament is on the entertainment program.