

Drives in 1940 and 1949 National Opens Compared

By ROBERT TRENT JONES

(By arrangement with the USGA and Robert Trent Jones, golf architect, GOLFDOM presents this authoritative data on driving in National Open championships. It is one of the too few collections of fact to be submitted in the discussion about the length of the ball. —Editor)

In the spring issue of the United States Golf Association Journal, 1949, John D. Ames, Chairman of the USGA Implement and Ball committee, wrote an article on the present length of the ball as compared to its pre-war length, the comparison being made from the tests made by the Armour Institute at the request of the USGA in 1941 and again in 1948 with some six thousand balls at variable temperatures. These tests were made in order to help determine what should be the effective "freeze" of the ball length in order to retain the playing conditions at a standard and so eliminate the constant changing of golf courses in order to meet new or lengthened playing conditions.

It was Ames' conclusion that there might possibly be an increase in the length of the ball over its pre-war level and that this could be due to the use of improved or better materials. The manufacturers, however, felt that there had been no increase, and one manufacturer pointed out that the preparing of the mechanized unit used to make these tests by the Armour Institute might have had something to do with the variations shown between the tests before and after the war.

Before the United States Open championship was held at Canterbury in 1940 I became interested in the idea of testing the length of the drives of the players in the field of the Open championship, in order to check my own interpretation of the length of the drives of the cream of the American golfers as a determining factor in the placing of traps and the design of greens in the building of our new golf courses. In order to do this, I consulted Joe Dey, the Executive Secretary of the USGA, and requested the privilege

of making these tests during the tournament. Consent was readily given and it was pointed out that the USGA was also very much interested in the results of these tests.

We chose the fifth hole at Canterbury GC near Cleveland for the test, this being the most level hole on the course from the tee up to the 290 yard mark. At this point a slight hill made the hole run uphill; but since the majority of the drives were unable to reach the incline, the test was made under what we think were fairly normal conditions.

253.4 Yards in 1940

An effort was made to keep an accurate tabulation of the wind direction and its approximate strength as a factor in aiding the drives during the various periods of the day. No attempt was made to do this with mechanized equipment for the accurate measurement of the wind velocity; it was done more by "feel" as to whether the wind was slight, medium or hard. The results of these tests showed that the average drive for the complete field during the second day of the championship at Canterbury was 253.4 yards.

We have recently again made a check of the complete field of the Open championship during the 1949 Open at the Medinah CC near Chicago. This check was made on the tenth hole of the course which is perfectly flat, and it so happened that a boundary fence along this hole made it possible to check accurately every ten feet of the drive. For this reason it was also possible to check the flight and roll of the ball, which was not done at Canterbury. The condition of the fairway turf was about the same as it was at Canterbury; though possibly it was a trifle harder. The wind on the tenth hole came constantly from one direction, from the back of the tee, therefore aiding the drive. The variation in the wind according to our best guess was five to 15 miles an hour; and it came sometimes in gusts. During the course of the day the survey was made there was a constant breeze aiding the tee shot.

260.2 Yards in 1949

The average length of the drive for the whole field on the first day of the cham-

49th NATIONAL OPEN GOLF CHAMPIONSHIP OF U. S. G. A. MEDINAH COUNTRY CLUB NO. 3 COURSE, MEDINAH, ILL.

COMPARATIVE DISTANCES OF DRIVES — FIRST ROUND — JUNE 9, 1949 MEASURED ON 10TH HOLE

Legend — Carry —————; Roll —————; C - Center of Fairway; RF - Right Fairway; LF - Left Fairway; RR - Right Rough; LR - Left Rough; TL - Trap on Left; T - Topped; Average Drive, 260.2 yds.



pionship at Medinah was 260.2 yards. The flight, for the field, of the ball was 231.9 yards. Shots that were under 215-220 yards were not counted, as these were not indicative of the normal tee shots of players of this caliber. Shots that split the center of the fairway averaged 263.5 yards; and the average flight of these drives was 233.9 yards.

Certain players obtained a much longer

roll than others but the type of swing of these players had a bearing upon the carry and roll. For example the long hitters Jimmy Thomson, Chick Harbert and Skip Alexander all have swings of the type that get a high trajectory, and their shots have very little roll. Players with swings of the type of Claude Harmon's, having more upright swings of the closed-face school, obtained longer rolls.

The accompanying chart will give a clear idea as to the number of hooks and slices and the number of trapped balls that went into the trap on this hole at the 230-240 yard mark from the tee.

According to our statistics there is a difference of seven yards in the average drive between the test made in 1940 at Canterbury and the test made in 1949 at Medinah.

Variable Factors Considered

The machine tests made for the USGA indicate a slight increase in the ball which could account for this difference. There are other variables that might have a bearing on the difference such as the slight differences that might have been brought about by the velocity of the wind. This was pointed up the second day of the 1949 tournament when, during a dead calm, a check was made on 20 players who had played the day before. During this period with no wind, the drop in yardage was about eight yards per player. This of course would not account for the difference between the Canterbury check and the Medinah check for in both cases there was an aiding wind. The length of the cut of the grass and the hardness of the ground could also be variable factors, but from the appearance and feel of the turf it is our opinion that this variation was very slight.

It may be possible that the longer hitters are now qualifying for the championship in the various sections of the country; although this theory should not be given too much credence. The design of the hole might tend to offset this difference slightly, although it is our opinion that with these two particular holes that this is not the case, as both holes adapted themselves to free lusty swings. The trap on the left at Medinah was more effectively placed, but we doubt that this had any bearing on the results of the survey.

It was interesting to note that as far as the low scoring players and the name golfers of the country are concerned, they are all in the big-hit category, as can be seen by the accompanying graph.

Professionals Acclaim Golf Equipment Inventory Form

Golf Equipment Inventory forms prepared by the National Golf Foundation for club professionals have met with popular acclaim from all who have used them. According to the many letters received the forms make possible a record of the member's playing equipment which has long been needed. Al Braak, professional, Elmwood CC, Marshalltown, Iowa, writes:

"Your Golf Equipment Inventory sheets have made a hit with my members and with several insurance men also. They

have followed up with a letter to their policy holders advising them to have me make a valuation at this time and file it with their insurance papers. Several large Country Club fires in Des Moines the past few years have made all members of Country Clubs in this area insurance wise."

The form enables the professional to provide members with information on the extent and condition of equipment.

The sheets are made up in pads of 50 at 75 cents each or 3 pads for \$2.00 and may be obtained by writing to the National Golf Foundation, 407 S. Dearborn, Chicago 5, Ill.

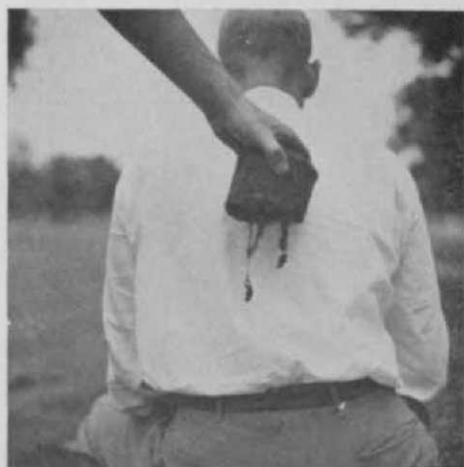
PREVENTING BENT DAMAGE

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watering on hot days to prevent the young grass from withering and dying. Watering once a day is not enough.

Many clubs would have been wise to close the course for play for a half day when rain on Friday or Saturday made the surfaces excessively wet. In some instances rain stopped at nine in the morning and then players came in droves. No wonder there was no grass around the cups.

Bare ground on some collars or the outside edge of the putting green was due to the bruising action of the power-driven drum on the mower. Damage occurred from mowing when the grass was wilting



Many greens which suffered severe damage two years ago showed no signs of injury this year. This is attributed to a regular schedule of cultivating. This sample shows long grass roots in holes made by drilling green with turferator.

and from making a quick turn. Several greenkeepers stopped their men from mowing when the grass was wilting and were wise in doing so. Several blame corrugations on the drum. They may be bad in the odd spell of severe weather.

Chlordane has been very effective in controlling cutworms and sod webworms.