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EXPLANATION SINGLE FLASH PICTURES OF CONTACT BETWEEN
CLUB AND BALL IN AN ORDINARY HIGH POWERED DRIVE

The accompanying series of single-flash pictures illustrates the sequence of contact between club and ball in an ordinary high-powered drive. The club was swung by a driving machine and propelled a Spalding Dot ball approximately 250 yards carry-and-run. The initial contact, the flattening, and the recoil of the ball from the club-face, can be clearly seen.

Notice that the ball reaches substantially its maximum flattening before its front edge moves at all. Notice, too, that as the ball is compressed horizontally, its vertical diameter elongates, and similarly, as it reacts from the compression, in leaving the club, the horizontal diameter is stretched, and the vertical shortened. These pictures provide valuable clues to the stresses to which the interior of the ball is subjected.

From other similar photographs made especially for quantitative measurement, the following interesting facts have been determined:

For the contact pictured here:

| | | |
|---|---------|----------------|
| The total duration of contact was | 0.00040 | secs. |
| Time of compression was | 0.0002 | " |
| " " decompression (restoration of ball) was | 0.0002 | " |
| Backspin (Loft of club 12 degrees) at rate of | 4800 | revs. per min. |
| Velocity of ball leaving club was | 238 | ft. per sec. |
| " " club before impact was | 162 | " " " |
| " " " after impact was | 125 | " " " |
| Diameter of ball at rest (standard) | 1.68 | inches |
| Maximum diameter of ball was | 1.78 | " |
| Minimum " " " " | 1.56 | " |
| During contact face of club moved | 0.35 | " |