

Index

- Aaron, Henry, 158, 178, 217-219, 352
Adair, Jerry, 197
Alexander, Grover Cleveland, 124
Alou, Felipe, 352
All-Star Teams, 177-182, 269-270, 272, 303
Alston, Walter, 262
American Association, 3, 212
American League, 3, 10, 212, 221-222
 expansion of, 240
 1961 games, 225
 and New York Yankees, 308
Aparicio, Luis, 23, 78, 176, 179, 180, 235, 236, 352
Applied Experimental Psychology, 114n
Ashburn, Richie, 352
"At bats," 40-41
Athletics, Philadelphia; *see* Philadelphia Athletics

Baker, J. Franklin ("Home Run"), 169
Balderschun, Jack, 119
Baltimore Evening Sun, 236
Baltimore Orioles, 53, 96, 130, 152, 168, 177, 191, 234-236
 and New York Yankees (1960), 199-209
Banks, Ernie, 158, 176, 178
Barber, Steve, 199
Barzun, Jacques, 292
Baseball (ball):
 dynamic balance of, 103
 and homerun production, 25-26, 162-171
 and power factor, 27
 resilience of, 17, 22-37, 103, 116, 160, 277, 301, 304
 trajectory of, 100-102
Baseball (game):
 and elementary probability theory, 38-60
 fundamental circumstances of, 4
 greatest offensive players of, 277-287
 historical background, 1-4, 288-293
 and laws of chance, 5-21
 transitional probabilities of, 20
Baseball's Book of Official Records, 277n
Baseball Writers Association, 178
Base hit, 138

Base on balls, 15, 37, 44, 45, 73, 85-90, 94, 173, 299, 304, 314
 and double play, 85, 87, 88
 in minor league play, 211
 and total base hits, 67
Batting, 130-154, 277, 301
 averages, 40, 130, 133-137
 order, 213-219
 "slumps," 139-145, 150-151
 see also Bragan, Bobby; Runs, batted in

Bauer, Hank, 188, 216
Berg, Morris, 72
Berra, Yogi, 72, 174, 188, 190, 216
Big Inning, 94, 168, 288
Blasingame, Don, 352
Boddington, Clem, 97n
Boston Red Sox, 67, 96, 157
Bostons, 3
Bouton, Jim, 259
Boyd, Bob, 206
Boyer, Ken, 178, 188, 263, 352
Boy's Own Book, The, 2
Bragan, Bobby, 147-148, 213-219, 302, 304
Brandt, Jack, 199, 206, 352
Braves, Milwaukee; *see* Milwaukee Braves
Brecheen, Harry, 197
Breeding, Marv, 206, 352
Brodie, Steve, 153
Bruton, Billy, 352
Bunker, Wally, 147
Bunning, Jim, 105, 107
Burdette, Lew, 127
Burke, Leo, 197

Callison, Johnny, 238, 352
Carey, Andy, 188, 190, 216
Cash, Norman, 178, 285, 352
Cepeda, Orlando, 158, 352
Chapanis, Alphonse, 114n
Chicago White Sox, 3, 72, 192, 224
 in 1960 pennant race, 204
Cincinnati "Reds," 7
Clarke, William J., 153-154
Cleveland Indians, 165, 191
"Clutch hitting," 193, 232

- Cobb, Ty, 20, 24, 36-37, 130, 138, 146, 158, 180, 250, 277, 303, 305
 career statistics of, 279-283, 285
- Colavito, Rocky, 158, 159, 160, 179, 181, 235, 285
- Colts, Houston; *see* Houston Colts
- Comiskey, Charles, 3
- Conley, Gene, 127
- Daley, Arthur, 119, 122
- Davis, T., 352
- Davis, Willy, 352
- Deford, Frank, 65-66, 175, 217
- Demeter, Don, 238
- Detroit Tigers, 180
- DiMaggio, Joe, 138-139, 158, 277, 303
 career statistics of, 279, 284-285
- Double, 45
- Doubleday, Abner, 19
- Double play, 20, 43, 45, 54
 and base on balls, 85, 87-89
 and fielding, 175
- Downing, Al, 259
- "Drag hit," 144
- Drysdale, Don, 259, 263
- Dunn, Jack, 197
- Dykes, Jimmy, 185, 190
- Eckfords of Brooklyn, 3
- Elliott, Bob, 190
- Encyclopedia of Baseball* (Turkin and Thompson), 164
- Error, 45, 175-178
 in minor league play, 211
 and scoring index, 68
- Extra-base hit, 42, 44
 vs. power factor, 67
- Farm system, 211
- Fashion Race Course, Long Island, 2
- Fatigue, 114-115, 118, 123
- Feller, Bob, 147
- Fence, 27-32, 35, 36-37
 and home run production, 162-171
- Fernandez, Chico, 351
- Fielder's choice, 44, 45
- Fielding, 175-182
- Finigan, Jim, 197
- Fireside Book of Baseball, The*, 97, 292
- Fitzgerald, Ed, 106
- Florida State League, 212
- Flyball, 43-44
- Football, 273-276
- Ford, Whitey, 205, 259, 263, 269
- Forest Citys of Cleveland, 3
- Forest Citys of Rockford, 3
- Foul fly, 73, 94
- Fox, Nellie, 178, 179
- Foxx, Jimmy, 32, 36, 158, 160, 166, 277, 303, 305
 career statistics of, 279, 283, 284
- Francona, Tito, 179, 194
- Freese, Gene, 352
- Frisch, Frank, 284
- Gallagher, Jim, 25n
- Garner, W. R., 48, 114n, 126-128, 271, 308
- Gauss, Carl Friederich, 263, 270, 312
- Gehrig, Lou, 24, 32, 36, 158, 277, 303, 305
 career statistics of, 279, 283
- Geiger, Gary, 352
- Gentile, Jim, 158, 159, 160, 166, 197, 199, 206, 236
- Giants, New York, *see* New York Giants
- Gilliam, Jim, 263, 352
- Ginsberg, Joe, 197
- Gonzales, Tony, 238, 352
- "Gopher ball," 32, 98, 160
see also Baseball, resilience of
- Gordon, Joe, 190, 194
- Green, Gene, 352
- Greenberg, Hank, 36, 158, 160, 166, 277, 303
 career statistics of, 279, 284
- Groat, Dick, 178
- Grove, Lefty, 124
- Hall of Fame, Cooperstown, New York, 73, 158, 174, 277, 280
- Hansen, Ronnie, 197, 199, 206
- Harris, Lumen, 197
- Harshman, Jack, 127
- Haymakers of Troy, 3
- Held, Woody, 176
- Henderson, R. W., 1
- Hinton, Chuck, 351
- Hit-and-run play, 15, 20, 73, 91-95, 299-300, 304, 314
- Hit batsman, 44, 45
 and scoring index, 68
- Hoak, Don, 238, 262
- Home run, 45, 155-161
 and power factor, 25-26, 35, 67-68
 probability of, 27, 35
 production, analysis of, 162-171
 and stadium area, 30, 35
 and weight of bat, 34-35
- Hornsby, Rogers, 24, 32, 36, 158, 277, 303, 305
 career statistics of, 279-280, 283
- Houston Colts, 121, 123, 153
- Howard, Elston, 188, 216

- Howard, Frank, 263
 Howser, Dick, 176, 352
 Hubbell, Carl, 124
- Indians, Cleveland; *see* Cleveland Indians
 "Iron Fireman," 96, 196
- Javier, Julian, 351
 Jennings, Hughie, 94, 153, 202
 Johnson, Walter, 250
 Jones, Bobby, 224
 Joss, Addie, 106
 Jorges, Billy, 190
- Kaline, Al, 78, 146, 178, 179, 180, 351
 Kasko, Eddie, 176, 351
 Kekiongas of Fort Wayne, 3
 Kell, George, 149
 Keough, Marty, 351
 Killebrew, Harmon, 158, 159, 160, 166, 179, 235
 Kirkland, Willie, 351
 Knickerbocker Baseball Club of New York, 2
 "Knuckle ball," 99
 Koufax, Sandy, 249, 259, 262, 269
 Kubek, Tony, 188, 216
 Kuenn, Harvey, 23, 178, 179, 181
- Landis, Jim, 351
 Larsen, Don, 106
 Lavagetto, Cookie, 190
 Law, Vernon, 127
 League standing, 10
Life Magazine, 170n
 Linz, Phil, 263
 Long Ball, 22, 24-26
 and base-stealing, 78
 and Big Inning, 94
 Lopez, Al, 190
 Lopez, Hector, 188, 190, 216
 Los Angeles, 7
 Lumpe, Jerry, 188
- McCardell, Roger, 197
 McDougald, Gil, 174, 188, 190, 216
 McGraw, John, 4, 94, 97-98, 153, 168, 202, 277, 303
 offensive ability of, 283
 Mack, Connie, 4, 94
 McMahan, Don, 121
 MacPhail, Lee, 175n, 201
 Manager, average tenure of, 184-185
 rating of, 183-198
 Mantle, Mickey, 23, 78, 132, 133, 146, 158, 159, 160, 166, 174, 178, 188, 190, 216, 218, 249, 263, 277, 303, 305, 354
 career statistics of, 279, 283, 285
 Maris, Roger, 34, 157, 158, 159, 160, 166, 178, 285
 Mathews, Ed, 158, 160, 178, 352
 Mathewson, Christy, 124, 250
 Mauch, Gene, 238
 Mays, Willie, 158, 178, 218, 303, 352
 career statistics of, 279, 284
 Miller, Stu, 117
 Milwaukee Braves, 213
 Minnesota Twins, 224
 Minor leagues, 147, 211-212
 Minoso, Minnie, 179, 352
 Moon, Wally, 352
 Morgan, C. T., 114n
 Most Valuable Player Award, 149, 178-180, 303
 Musial, Stan, 249
 Mutuals of New York, 3
- National Association of Professional Baseball Players, 3
 National Football League, 272, 274
 National League (of baseball clubs), 3, 212, 222
 expansion of, 240
 1961 games, 225
 1963 games, 231
 New York Giants, 4, 97, 168
 pitching staff of, 120-121
 New York Mets, 185, 222-223
New York Times, 119
 New York Yankees, 4, 25, 132, 184, 234, 237, 308-309
 and the Orioles (1960), 199-209
 Nicholson, Dave, 197
 Nicklaus, Jack, 159
 Northern League, 212
- O'Connell, Danny, 352
Official Baseball Guide, 180
 Olympic Club of Philadelphia, 2
 Orioles, Baltimore; *see* Baltimore Orioles
 Ott, Mel, 158, 277
 Owens, Jim, 237
- Pascual, Camilo, 127
 Pearson, Albie, 197, 351
 Pepitone, Joe, 263
 Perfect (no-hit, no-run) game, 53-54, 104, 123
 Perkinson, Bill, 236
 Perranoski, Ron, 119
 Philadelphia Athletics, 3, 4, 7, 169

- Philadelphia Phillies, 232-233, 237-238, 247
- Pierce, Billy, 105-106
- Piersall, Jim, 352
- Pilarcik, Al, 197
- Pinch-hitters, 108
- Pinson, Vada, 352
- Pirates, Pittsburgh; *see* Pittsburgh Pirates
- Pisoni, Jim, 188
- Pitching, 11, 34, 35, 96-129, 301
 - control, 118-119
 - and fatigue, 114-116, 123
 - and innings pitched, 109-112, 115
 - and motivation, 115
 - mound, 98-102
 - and platooning of pitchers, 112-114, 117-129, 302-303, 304, 305
 - and recovery time, 116-117
 - and sacrifice play, 81
 - and scoring index, 80
 - "warm-up," 118
- Pitchout, 94
- Pittsburgh Pirates, 213, 217
- Platoon system
 - and Baltimore (1960), 205-210
 - and managers, 183-198
 - and pitchers, 112-114, 117-129, 207-208, 302-303, 304
- Players, evaluation of, 172-182
 - survival rates, 173-174
- Podres, Johnny, 259, 262
- Polo Grounds, New York, 166, 168
- Power Factor (PF), 23-24, 26-27, 277
 - and the ball, 103
 - and batting averages, 136-138
 - and home runs, 35, 155-171
 - and scoring index (DX), 68
 - see also* Home run
- Powers, John, 197
- Raymond, "Bugs," 97-98
- Red Sox; *see* Boston Red Sox
- Richards, Paul, 119, 121, 123, 190, 197, 199, 205, 207
- Richardson, Bobby, 146, 188, 190, 263
- Riedel, Bobby, 197
- Rigney, Bill, 119, 122
- Roberts, Robin, 127, 174, 237
- Robertson, Wilbert, 106, 153, 202
- Robinson, Brooks, 148-152, 197, 206
- Robinson, Eddie, 197
- Robinson, Frank, 158, 178, 352
- Rockne, Knute, 275
- Romano, Johnny, 179
- "Rounders," 2
- Runnels, Pete, 178, 179, 235
- Runner, 44-50
- Runs, 130-132
 - batted in, 132-133
 - defensive scoring of, 15
 - offensive scoring of, 14-15
 - see also* Home run
- Ruth, Babe, 20, 24-25, 32, 33, 36, 107, 124, 130, 138, 146, 155-161 *passim*, 166, 180, 249, 250, 277, 303, 305
 - career statistics of, 279-280, 283, 284
- Sacrifice plays, 15, 20, 40, 42-44, 45, 55, 73, 80-84, 94-95, 298, 303, 304, 305
 - and scoring index (DX), 67, 70
 - and total runs, 81, 90
- St. Louis Browns, 157, 168
- Saverine, Bob, 197
- Scores, probable distribution of, 226-232
- Scoring index (DX), 16, 17, 63-72, 73, 296, 312
 - and American League pitchers, 107
 - and batting averages, 136
 - and batting order, 213-219
 - and the players, 131, 175-182
 - and sacrifice plays, 80, 83, 298
 - and score distribution, 231
 - and stolen base, 64-65, 68, 73, 78, 298
 - of the team, 131-136, 300-301, 309
- Scoring probabilities, special equations for, 61-72
- Second baseman, 175-176
- Senators, Washington; *see* Washington Senators
- Shore, Ernie, 106
- Shortstop, 175-177
- Siebern, Norm, 188, 190, 216, 236
- Single, 45
- Skinner, Bob, 352
- Skowron, Bill, 146, 179, 180, 188, 190, 216
- Slaughter, Enos, 132, 188
- Smith, Al, 235
- Snead, Sam, 159
- South Atlantic League, 212
- Southern Association, 212
- Spahn, Warren, 127
- Sports Illustrated*, 33, 65, 119, 128, 217
- Squeeze bunts; *see* Sacrifice plays
- Stengel, Casey, 19, 72, 78, 94, 185, 186, 190, 199, 207, 215, 216, 234, 248, 283
- Stolen base, 15, 16, 44, 45, 54, 76-79, 95, 304, 314
 - and scoring index (DX), 64-65, 68, 73, 78, 298
- "Stool-ball," 1-2
- Story of Research* (T. A. Boyd), 276

- Strike-zone restrictions, 239, 247, 248-249
Stuart, Dick, 150
Taylor, Tony, 352
Team Play, general patterns of, 211-249, 278
Temple, Johnny, 352
This Week Magazine, 34
Three "I" League, 212
Throneberry, M. Faye, 188
Tigers, Detroit; *see* Detroit Tigers
"Town ball," 2
Tresh, Tom, 263
Triandos, Gus, 179, 206
Triple, 45
Trueman, Richard E., 20, 57
Twins, Minnesota; *see* Minnesota Twins

Umbricht, Jim, 121
Umpires, 103

Vander Meer, Johnny, 104
Versalles, Zoilo, 352

Waddell, George (Rube), 124
Ward, Pete, 235
Washington Senators, 173
Western League, 3
White, Bill, 352
White Stockings of Chicago, 3
Wilhelm, Hoyt, 105, 119
Williams, Ted, 23, 24, 158, 277, 303, 305
 career statistics of. 279, 283
Wills, Maury, 78, 176, 249, 280, 352
Wilson, "Hack," 36, 159, 160
Wood, Wilbur, 352
Woodeshick, Hal, 121, 123
Woodling, Gene, 206
Work unit; *see* Pitching, innings pitched
World Series, 6, 250-276
 of 1905, 4
 of 1911, 4
 of 1913, 4
 of 1958, 106, 215
World War II, 33

Yankees, New York; *see* New York Yankees
Yost, Eddie, 173, 179
Young, Cy, 106

