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SCARNE'S

New Complete Guide To GAMBLING

by **JOHN SCARNE**

**World's Foremost
Gambling Authority**

EVERYTHING YOU NEED TO KNOW TO PLAY WELL:
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14. *Roulette*

Roulette, the glamour casino game, is the favorite gambling game of 9 million American women and 4 million American men. Visit any casino in Europe, South America, Nevada or the Caribbean islands and you will find that on the average three out of the five players seated at a Roulette table are women. My survey reveals that each year approximately \$150 million was lost by Americans at Roulette, of which 50% or \$75 million is lost by women.

Roulette is said by some historians to have been invented in 1655 by the French scientist Blaise Pascal, during his monastic retreat, and first played in a makeshift casino in Paris. Other historians say it was invented by a French monk to help break the monotony of monastery life. Still others say it originated in an old Chinese game whose object was to arrange 37 statuettes of animals in a "magic square" of 666, but they fail to describe the method of play. They add that the game was later played in Tibet and eventually by French Dominican monks, one of whom transposed the statuettes into numbers from 0 to 36 and arranged them haphazardly along the rim of a revolving wheel. Since the early French wheels of the 1800s had both the 0 and 00, this theory does not sound plausible.

ROULETTE WHEELS—YESTERDAY AND TODAY

Despite considerable research, I have not found any reliable evidence on the true origin of the game, but I did discover that the modern game historians who say that the first Roulette wheels to appear in French casinos were identical with those used today in French and other European casinos are wrong. The *American Hoyle*, printed



Roulette wheel in action at the Hilton Flamingo casino in Las Vegas. Black Jack tables and slot machines can be seen in background at left. (Las Vegas News Bureau)

the next decade or two American Roulette wheels will have only the single 0, as do the present European wheels.

Fortunes have been won and lost by women and men at Roulette. The largest sum of money known to have been won on a single spin of the wheel is \$67,500. The incident took place at Caesar's Palace, a swank Las Vegas hotel casino. The winner, a Mexican businessman on vacation, asked for and was given a \$500 maximum limit on straight, split, corner, street and line bets. The businessman, after making several small bets, placed a \$500 straight bet on 4 and backed it with four \$500 split bets and four \$500 corner bets. The croupier spun the wheel, then the ball, and lo and behold, the little ivory ball dropped and came to rest in the number 4 slot and the Mexican gambler collected \$67,500 in winnings.

A California woman, the wife of a retired oil magnate, once confided to me that during the past five years her total losses at Roulette in European and American casinos exceeded the \$3 million mark.

The largest sum of money known to have been lost at a single roulette session in the United States was \$1,250,000 lost by an American industrialist at a Saratoga casino one evening during the month of August 1946. The special limit put into effect for the industrialist was \$25,000 on an even-money bet and \$1,000 on a single number, with an additional \$1,000 any way he could reach the number, such as a split, corner, or street bet. For example, a \$2,000 limit bet on a single win-

(p. 397)

Roulette wheel in action at the Hilton Flamingo casino in Las Vegas. Black Jack tables and slot machines can be seen in background at left. (Las Vegas News Bureau)



(crop of image on p. 397)

ning number paid \$72,000 (\$70,000 in winnings plus the original \$2,000 wager).

P.S. The high limit didn't worry the casino operators because the wheel was gaffed! The industrialist settled his losses for \$500,000.

Europeans and Latin Americans play Roulette much more than Americans do, but Roulette tables can now be found in most legal and illegal gambling casinos in this country, especially in the luxury rug joints. More than any other casino game, Roulette has an aura of glamour that makes it especially attractive to women. When a woman enters a casino for the first time, it is almost a sure bet that, after playing the slot machines, the first game she tries will be Roulette.

This is the game which the handsome hero and well-dressed heroine have played for years in countless motion pictures, books and short stories. It has been publicized as the game of millionaire playboys, of kings and princes. It is celebrated in many stories of fortunes won and lost, of mathematical wizards who have spent years developing Roulette systems, and even in a song: "The Man Who Broke the Bank at Monte Carlo." Roulette is the world's oldest banking game still in operation, and through the years it has given rise to many true stories, as well as much that is legend and myth.

A great part of Roulette's fascination also lies in the beauty and color of the game. The surface of the handsome mahogany table is covered with a blazing green cloth which bears the bright gold, red and black of the layout. The chromium separators between the numbered pockets on the wheel's rim glitter and dance in the bright light as the wheel spins. The varied colors of the wheel checks stacked on the table's apron and before the croupier and scattered on the layout's betting spaces, the evening clothes of the women, the formal dress of the men, the courteous croupiers—all add to the enticing picture.

The neophyte soon discovers that although the betting layout looks complicated the game is easy to learn. The women are also attracted by the odds the bank offers, which are higher than most other casino games. One chip on a straight winning number is paid off at 35 to 1 and the player receives a stack of 20 and a stack of 15 chips.

Before entering on a detailed discussion of the game, we need to examine the equipment used. In the description that follows you will find, for the first time in print, a detailed explanation of the construction and inner workings of the Roulette wheel itself.

STANDARD ROULETTE EQUIPMENT

Roulette tables: There are two styles of Roulette tables found in American casinos. One is the standard table, which has one betting

layout with the Roulette wheel at one end; the other, called the double-end table, has two layouts with the wheel in the center between them.

Roulette layout: The layout is a multicolored design printed on green baize that covers the players' side of the table and forms the betting section. The main portion of the design is comprised of 36 numbered rectangular spaces arranged in three long columns of 12 spaces each. The spaces at the head of the columns are numbered 1, 2, 3, and are nearest the wheel. The numbering continues in sequence across the columns, ending with 34, 35 and 36 at the foot of the columns farthest from the wheel. Directly below these numbers are three blank spaces. A chip placed on one of these indicates that the player is betting on the 12 numbers on the long column directly above the space on which the chip rests. (On some layouts these squares are marked "2 to 1" and are located on the player's side of the table.)

Along one side of the long columns are three rectangular spaces marked "1st 12," "2nd 12" and "3rd 12." A chip placed on one of these spaces indicates that the player is betting on the first 12 numbers, 1 through 12; on the second 12 numbers, 13 through 24, or on the third 12 numbers, 25 through 36.

Next to these are six more spaces which read from left to right: "1-18," "Even," "Red," "Black," "Odd," "19-36." Above the three long columns are two spaces with pointed tops containing the figures 0 and 00.

Roulette balls: The balls used are made of ivory or synthetic plastic. They vary in size from $\frac{1}{2}$ inch to $\frac{3}{4}$ inch in diameter.

Wheel checks, or chips: The standard Roulette table employs 5, 6 or 7 sets of wheel checks (usually called chips). Each set is differently colored, each consists of 300 chips, and there is one set for each player. The chips are usually valued at 25¢ each, and the minimum number a player can buy is 20, \$5 worth. Some sawdust joints also sell 5¢ and 10¢ chips. The color of the chips indicates the player, not the value of the chips. If a player wishes to buy 50¢ or \$1 chips, the croupier places a 50¢ or \$1 marker on top of the stack of chips in the table's chip rack whose color corresponds to the chips purchased. Five-dollar and \$25 chips, which may be used at any gambling table in the casino, may also be purchased. These, unlike the other chips, do have a color indicating value.

Roulette wheels: There are two styles. The American wheel has 36 numbers and the signs 0 and 00. The French or European wheel, which has 36 numbers and only the single 0, is found mostly in European and South American casinos and is seldom seen in this country.

The American wheels used in the United States and the Caribbean

islands are, except for the double 00, similar in construction to the French wheels. They are made up of two separate parts; the table, which is stationary, and the wheel itself, which is movable and manually rotated.

Most of the table's area consists of the betting section and a large wooden, bowl-shaped recess called the *bowl*. This contains the wheel, which is called the *wheel head*. The interior diameter of the bowl is approximately 32 inches. It has a back track made of sturdy wood which contains an inch-wide groove running around the bowl's circumference. It is in this groove that the croupier spins the Roulette ball. When the speed of the ball diminishes it falls on to the bottom track of the bowl. The revolving wheel head and the bottom track are marked off by black lines into eight equal sections. In the center of each section on the bottom track there is a small metal obstacle 2 inches long, $\frac{1}{2}$ inch wide and $\frac{1}{2}$ inch thick. These obstacles are placed alternately vertically and horizontally and the rolling ball, as it strikes them, is given a random and unpredictable motion.

The bowl's bottom underneath the wheel is open, and below it there is a flat wooden base from the center of which rises a steel spindle, $\frac{1}{4}$ inch in diameter and 4 inches high.

The wheel head, the only moving part, consists of a solid wooden disk or plate, slightly convex in shape. Around its rim are metal partitions known as *separators* or *frets*, and the compartments or pockets between these are called *canoes* by Roulette croupiers. These pockets are metal, painted alternately red and black, except for two pockets which are green. Each of the red and black compartments bears a number from 1 to 36 in gold. The green pockets carry the signs 0 and 00, also in gold.

Most players and croupiers believe that the numbers 1 through 36 are arranged on the rim of the wheel head in a haphazard manner, except that red and black numbers alternate. There is nothing haphazard about the arrangement. An attempt has been made to alternate low, high, odd and even numbers as well as the red and black colors in such a way that each group of numbers and each color is spaced out in a mathematically balanced fashion. A perfect mathematical balance is not possible since the sum of the numbers 1 through 36 is 666, and the 18 odd numbers add to only 324 while the 18 even numbers add to 342. In order to attain the best possible mathematical balance, Roulette manufacturers use the following arrangement:

The signs 0 and 00 are directly opposite each other on the wheel-head rim, separated on each side by 18 numbers. The 0 pocket is between two black-numbered pockets and the colors alternate in both directions around the wheel, ending in two red pockets, one on each

The dealer is in charge of the conduct of the game. His main duties are selling chips to players, spinning the wheel, throwing the Roulette ball, announcing winners, collecting losing bets and paying off winning bets. The croupier separates and stacks the losing chips that have been collected or swept from the layout by the dealer. He stacks the chips in piles of 20 of the same color and places them in the chip rack on the table's apron. He helps the dealer pay off winning bets by stacking the correct number of chips in a convenient place to the left of the table's apron.

All large casinos use an additional employee, the *pit boss* or *inspector*. He stands in the pit ring, watches the game and is in charge of its conduct. He makes out cash-out, credit and fill slips, corrects any errors made by the croupiers or players and watches for cheating.

SCARNE'S RULES FOR PLAYING ROULETTE

The players begin making their bets placing chips on the spaces of the layout in any manner permitted by the rules. The dealer starts the wheel spinning in a counterclockwise direction, then flips the ball on to the bowl's back track so that it travels clockwise. Players may continue placing bets while wheel and ball are in motion until the dealer calls: "No more bets!" He does this as the ball slows down and is about to drop off the back track. Bets placed on the layout after this announcement are not valid and must be returned to the player or players.

When the ball falls and comes to rest between any two metal partitions of the wheel, it marks the winning number, a zero or double zero, the winning color, and any other permitted bet that pertains to a winning number or symbol. The dealer immediately announces the winning number and its color, and he points with his index finger to the corresponding number on the layout. Some dealers place a plastic peg (a half inch in diameter and two inches tall) on the winning number for all to see. He collects all losing bets, not disturbing the chips resting on winning spaces, and pays off the winner or winners with the correct amount of chips due each winning bet. The signs 0 and 00 win for the bank all bets except those placed on 0 and 00.

On the first spin the dealer has no fixed point from which to spin the wheel or ball. Thereafter he must spin both from the winning pocket into which the ball dropped. The croupier dealing the wheel is obliged to spin the ball with the hand nearest the wheel.

Some casinos give the player the privilege of asking the inspector or casino operator to substitute another dealer, and this may be done provided one or more of the other players at the table do not object.

No such substitution may take place until after the dealer has thrown the ball five times.

POSSIBLE ROULETTE BETS, ODDS AND PERCENTAGES

Since Roulette layouts do not vary in bets permitted, odds offered and percentages against the player, the following text covers all of the common bets permitted on any layout.

Straight bet or single-number bet: The player places his chips squarely on one number on the layout, making certain that the chips do not touch any of the lines enclosing the number. This indicates that the player is betting that number to win. Since there are 36 numbers on the wheel, plus the signs 0 and 00, making a total of 38, the correct odds are 37 to 1. The bank pays off at 35 to 1 and consequently has the advantage of the 0 and 00. In terms of percentage this is $2/38$ of 100, or $5\ 5/19\%$ (about 26¢ on a \$5 bet).

The signs 0 and 00: These can be played the same as any straight or single-number bet. The bank's favorable percentage is the same as on a straight bet: $5\ 5/19\%$ (about 26¢ on a \$5 bet).

Split bet or two-number bet: The player places his chips directly on any line separating any two numbers. If the winning number is one of the two wagered on, the player wins.

Payoff odds: 17 to 1

Correct odds: 18 to 1

Percentage favoring bank: $5\ 5/19\%$ (about 26¢ on a \$5 bet)

Street bet or three-number bet: The player places his chip or chips on the outside line of the layout. This indicates that he is betting the three numbers opposite the chips, going across the layout. If the winning number is one of these three the player wins.

Payoff odds: 11 to 1

Correct odds: $11\ 2/3$ to 1

Percentage favoring bank: $5\ 5/19\%$ (about 26¢ on a \$5 bet)

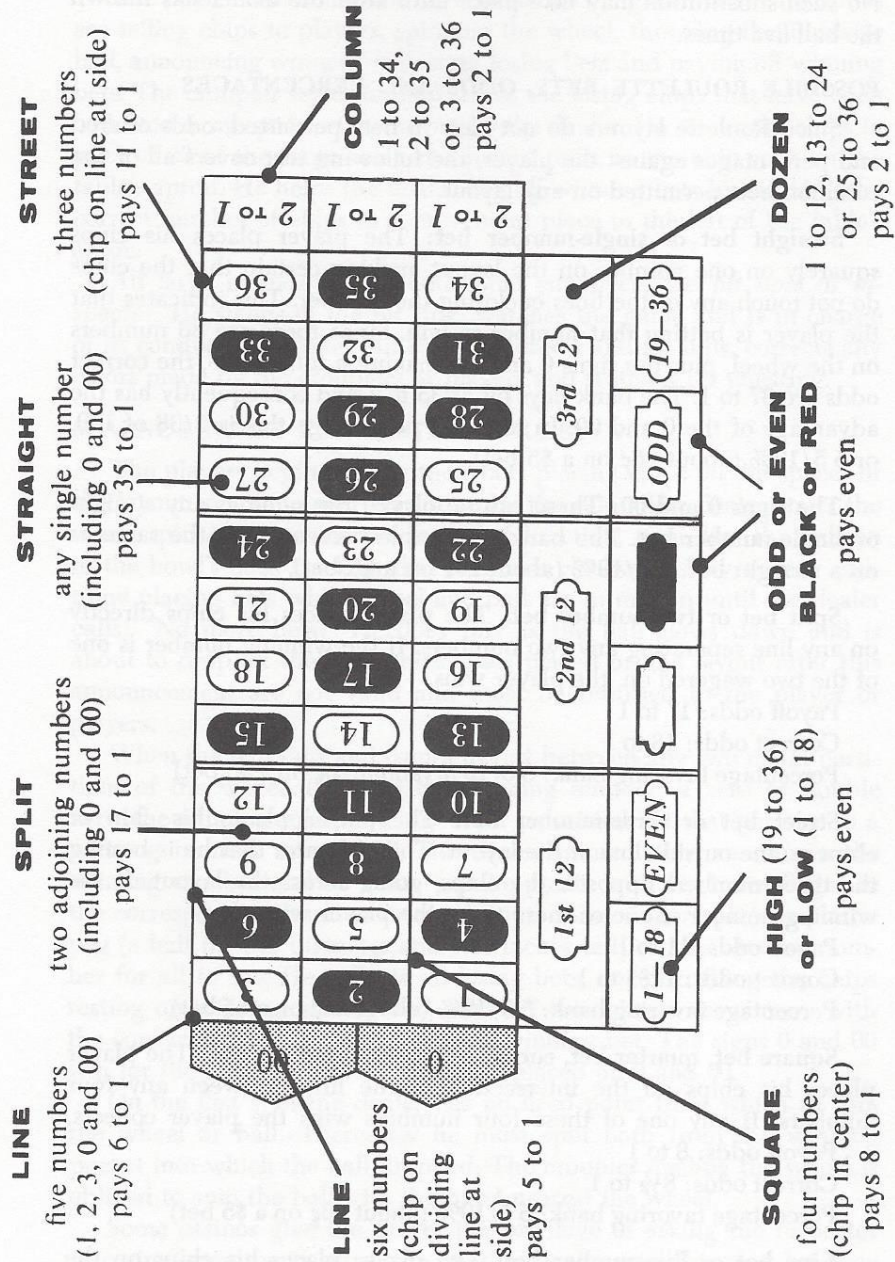
Square bet, quarter bet, corner bet or four-number bet: The player places his chips on the intersection of the lines between any four numbers. If any one of these four numbers wins the player collects.

Payoff odds: 8 to 1

Correct odds: $8\ 1/2$ to 1

Percentage favoring bank: $5\ 5/19\%$ (about 26¢ on a \$5 bet)

Line bet or five-number bet: The player places his chips on the line separating the 1, 2, 3 from the 0 and 00 spaces at a corner inter-



Players indicate the bet or bets they make by the placement of chips on the layout as shown here.

section. This indicates that he is betting that one of the numbers 1, 2, 3, or 0 or 00 will win.

Payoff odds: 6 to 1

Correct odds: $6 \frac{2}{3}$ to 1

Percentage favoring bank: $7 \frac{17}{19}\%$ (about 39¢ on a \$5 bet)

Note that the house percentage differs from the $5 \frac{5}{19}\%$ which is the bank's edge on all other Roulette bets. From the player's viewpoint it is therefore a bet to avoid because it has $2 \frac{12}{19}\%$ more against the player.

Line bet or six-number bet: The player places his chips on the intersection of the side line and a line between two "streets." If any of these six numbers wins, the player collects.

Payoff odds: 5 to 1

Correct odds: $5 \frac{1}{3}$ to 1

Percentage favoring bank: $5 \frac{5}{19}\%$ (about 26¢ on a \$5 bet)

Column bet or 12-number bet: The player places his chips on one of the three blank spaces at the bottom of the layout (some layouts have three squares marked "1st," "2nd," "3rd"). This indicates that the player is betting the 12 vertical numbers above the space wagered on.

Payoff odds: 2 to 1

Correct odds: $2 \frac{1}{6}$ to 1

Percentage favoring bank: $5 \frac{5}{19}\%$ (about 26¢ on a \$5 bet)

Dozens or 12-number bet: The player places his chips on one of the spaces of the layout marked "1st 12," "2nd 12" or "3rd 12." The 1st 12 indicates that the player is betting on the numbers 1 to 12 inclusive; the 2nd 12, the numbers 13 to 24 inclusive, and the 3rd 12, the numbers 25 to 36 inclusive.

Payoff odds: 2 to 1

Correct odds: $2 \frac{1}{6}$ to 1

Percentage favoring bank: $5 \frac{5}{19}\%$ (about 26¢ on a \$5 bet)

Low-number bet (1 to 18): The player places his chips on the layout space marked 1 to 18, which indicates that he is betting on the numbers 1 to 18 inclusive.

Payoff odds: Even money

Correct odds: $1 \frac{1}{9}$ to 1

Percentage favoring bank: $5 \frac{5}{19}\%$ (about 26¢ on a \$5 bet)

High-number bet (19 to 36): The player places his chips on the space of the layout marked 19 to 36, which indicates that he is betting on the numbers 19 to 36 inclusive.

Payoff odds: Even money

Correct odds: 1 1/9 to 1

Percentage favoring bank: 5 5/19% (about 26¢ on a \$5 bet)

Black color bet: The player places his chips on a space of the layout marked "Black." (Some layouts have a large black diamond-shaped design instead of the word "Black.") The player is betting that the winning color will be black.

Payoff odds: Even money

Correct odds: 1 1/9 to 1

Percentage favoring bank: 5 5/19% (about 26¢ on a \$5 bet)

Red color bet: This is the same as a black color bet except that the player places his chips on the space marked "Red," or the red diamond, and is betting that the winning color will be red.

Odd-number bet: The player places his chips on the space of the layout marked "Odd." The player is betting that the winning number will be an odd number.

Payoff odds: Even money

Correct odds: 1 1/9 to 1

Percentage favoring bank: 5 5/19% (about 26¢ on a \$5 bet)

Even-Number Bet: This is the same as the odd-number bet, except that the player is betting that the winning number will be even.

ROULETTE BETTING LIMITS

The maximum amounts permitted to be wagered on different spaces of the layout vary with each casino. The minimum bet allowed is usually four chips, be they 5¢, 10¢ or 25¢ chips. A player betting 25¢ chips must bet a minimum of four chips on one spin of the wheel, although the four chips can be spread over the spaces on the layout as desired, excluding even-money and 2 to 1 spaces. A minimum of four chips or a bet valued at \$1 is required on all even-money or 2 to 1 bets.

The standard maximum betting limits in Nevada are as follows: \$100 on a straight, split, street, corner or line bet and \$500 on any 2 to 1 or even-money bet. However, major casinos in Nevada will up their maximum betting limits at the sight of a high roller. Casinos in the Bahamas adhere to the same betting rules as Nevada. Puerto Rican casinos, where betting limits are government regulated, and various other casinos in the Caribbean permit the following maximum limits: \$10 on a single-number bet and any other way you can reach it (split, street, corner, line); \$180 on black, red, odd, even, high and low, and \$120 on dozens and columns. Although maximum limits may vary from casino to casino, the following maximum limits on all possible

19. Casino Side Games

Since casino operators, legal and illegal, seldom overlook an opportunity to grab an extra buck, any available space not suitable for a major standard casino game like Bank Craps, Black Jack or Roulette is usually occupied by one or more minor banking games known as *side games*. Most of these are games of chance of the carnival variety such as one finds at amusements centers, county and state fairs, American Legion and firemen's carnivals, and church bazaars.

The seven most popular side games, listed in order of their popularity, are: the Big Six, the Money Wheel, the Race Horse Wheel, Chuck-a-Luck, Hazard, Beat the Shaker, and Under and Over Seven.

The American gambling public loses about \$500 million annually playing these games, of which \$150 million is pocketed by the casino operators of the hundreds of big and small carpet and sawdust joints, and \$350 million by the amusement centers, fairs, carnivals, bazaars and fund-raising affairs.

These side games are all clever exercises in mathematical strategy designed to give the operators a big favorable percentage and at the same time make it as difficult as possible for the player to calculate the percentage. Casino operators and carnival hustlers have learned by experience that these games will get the players' dough much faster and more surely than any of the major casino games. The reason is that the house percentage averages three or four times more, running from a minimum 8% to a high of more than 20%. Betting limits vary, ranging from 10¢ to \$10 for some games and for others from \$1 up to \$100 and sometimes \$200 or \$300.

In casinos today it is the novice gamblers, male and female, who

give the side games their big action. Any gambler who knows even a little about house percentages and how they work avoids these games like the plague.

THE BIG SIX

The Big Six, or Jumbo Dice Wheel, is a giant wheel of chance five feet in diameter which, with its pedestal, stands eight feet high. It is the most popular of the casino side games and often earns the house \$1,000 or more per day.

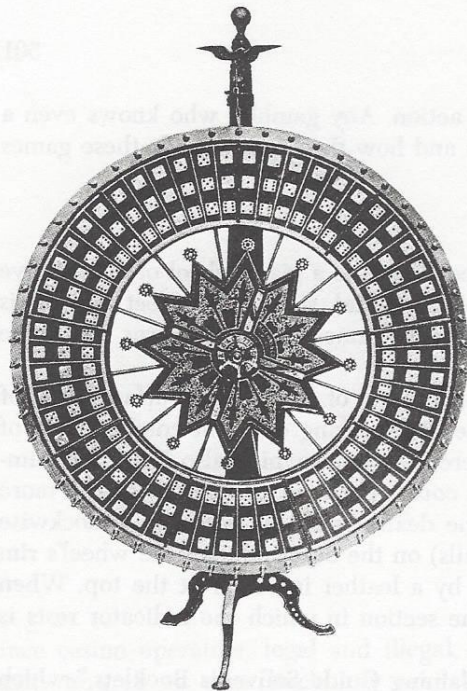
There are 54 spaces around the rim of the wheel's surface, each of which shows one side of three dice bearing different combinations of the numbers 1 through 6. There is a layout which also bears the numbers 1 through 6. The players *cover* (put their money on) one or more numbers on the layout and the dealer spins the wheel in a clockwise direction. Projecting *posts* (nails) on the outer edge of the wheel's rim separate the spaces and pass by a leather indicator at the top. When the wheel comes to a stop, the section in which the indicator rests is the winning combination.

This is how one of the "Gaming Guide Souvenir Booklets," which most luxury casinos distribute free to hotel and casino guests, describes the payoff odds.

It's THE BIG SIX FOR BIG THRILLS. You'll enjoy a thrill a minute at this spell-binding Wheel of Fortune. If you put \$1 on 1 and the wheel stops at 1-2-3, you get back \$1 plus the \$1 you invested since the 1 showed only once. If the wheel stops at 1-1-2 you get back \$2 plus the \$1 you invested since the \$1 shows twice. This holds true for all the numbers, i.e., if you play \$1 on 5 and the wheel stops on 4-5-6, you get back \$1 and your dollar. If it stops at 5-5-5, you receive \$3 and your \$1.

If you are still not convinced that this is the game for you, the Big Six dealer will explain further advantages of the game. He tells you that "there are three winners and three losers on each and every spin of the wheel." He illustrates this by putting a silver dollar on each of the six numbers on the layout, then he points to a space on the wheel marked 1-2-3 or a space marked 4-5-6 and tells you that if the wheel stops on either of these spaces the player who wagered \$1 on each of the six numbers on the layout can't lose any money. The player would win three \$1 bets and lose three \$1 bets, thus breaking even. He demonstrates this by collecting the three silver dollars on the losing numbers and uses them to pay off the three winning numbers. "Nothing," he adds, "could be fairer than that."

But what the casino booklet and the dealer fail to point out is that there are only six sections on the wheel that are dead even and contain



*A casino Big Six wheel
found in many Nevada
casinos and elsewhere.*

three different numbers. The other 48 sections contain 24 doubles (pairs), and 24 triplets (three of a kind). This arrangement gives the Big Six operator a favorable advantage of $22 \frac{2}{9}\%$, which is much too large for any player to overcome.

Here, without the help of algebra, trigonometry or differential calculus, using only simple grade-school arithmetic, is the proof that this is the correct percentage.

The wheel bears 54 sections of which 6 have no pairs, 24 have pairs, and 24 have three of a kind. Let's put a \$1 bet on each of the six numbers on the layout, spin the wheel 54 times, and assume that the "laws of probability" are strictly enforced and that each of the 54 spaces appears once as a winner. We wager \$6 on each of the 54 spins for a total of \$324.

In 6 spins of the wheel we get "no pairs," winning \$3 and losing \$3 each time. We come out even, having bet \$36 and taken down \$36.

On the 24 spins in which pairs appear, we have wagered a total of \$144. We take down \$72 on the double numbers at 2 to 1, and \$48 on the single numbers at even money, a total of \$120. Our loss is \$24.

On the 24 spins in which three of a kinds appear, we have wagered a total of \$144 and at 3 to 1 take down only \$96 for a loss of \$48.

Our total loss of \$72 divided by the total \$324 wagered gives us

the percentage in the operator's favor of 22 2/9%, or, in decimals, 22.22+%.

Since your average rate of loss is 22 2/9¢ on each dollar wagered, do you still think the Big Six is as attractive a proposition as the booklet and the dealer tried to make out?

Some Big Six wheels have fewer than 54 sections—48 or 30 or some other number—and the dice arrangements on their winning sections vary as well. The more often triplets appear on the wheel, the greater the operator's percentage.

THE MONEY WHEEL

The mechanical structure and rules of play of the Money Wheel are very much like the Big Six except that it uses a different betting layout and has a different number of sections on the wheel's rim. This changes the payoff odds and the operator's favorable P.C.

The rim of the wheel is divided into 50 sections covered with glass, and in 48 of these are new American greenbacks in denominations of \$1, \$2, \$5, \$10 and \$20. The remaining two sections bear a picture of the American flag and of a joker. There are seven corresponding betting spaces on the layout showing \$1, \$2, \$5, \$10, \$20, flag and joker.

The values of the bills indicate the payoff odds to winners. A winning bet on the \$1 bill is paid off at even money or 1 to 1 odds. A winning bet on the \$2 bill is paid off at 2 to 1 odds, on the \$5 at 5 to 1 odds, on the \$10 at 10 to 1 odds, on the \$20 at 20 to 1 odds. A winning bet on the flag pays off at 40 to 1 odds, and you also receive 40 to 1 for a winning bet on the joker.

Some Money Wheel players think that the big odds offered cut down the operator's edge, and some even believe that the game is almost dead even. This logic, or rather lack of it, is what makes Money Wheel operators rich. The operator's favorite percentage is calculated in the same way as on the Big Six.

Of the 50 sections on the wheel, 22 contain a \$1 bill, 14 contain a \$2 bill, 7 contain a \$5 bill, 3 contain a \$10 bill, 2 contain a \$20 bill, and there is one flag and one joker. There are 7 betting spaces on the layout corresponding to the betting groups.

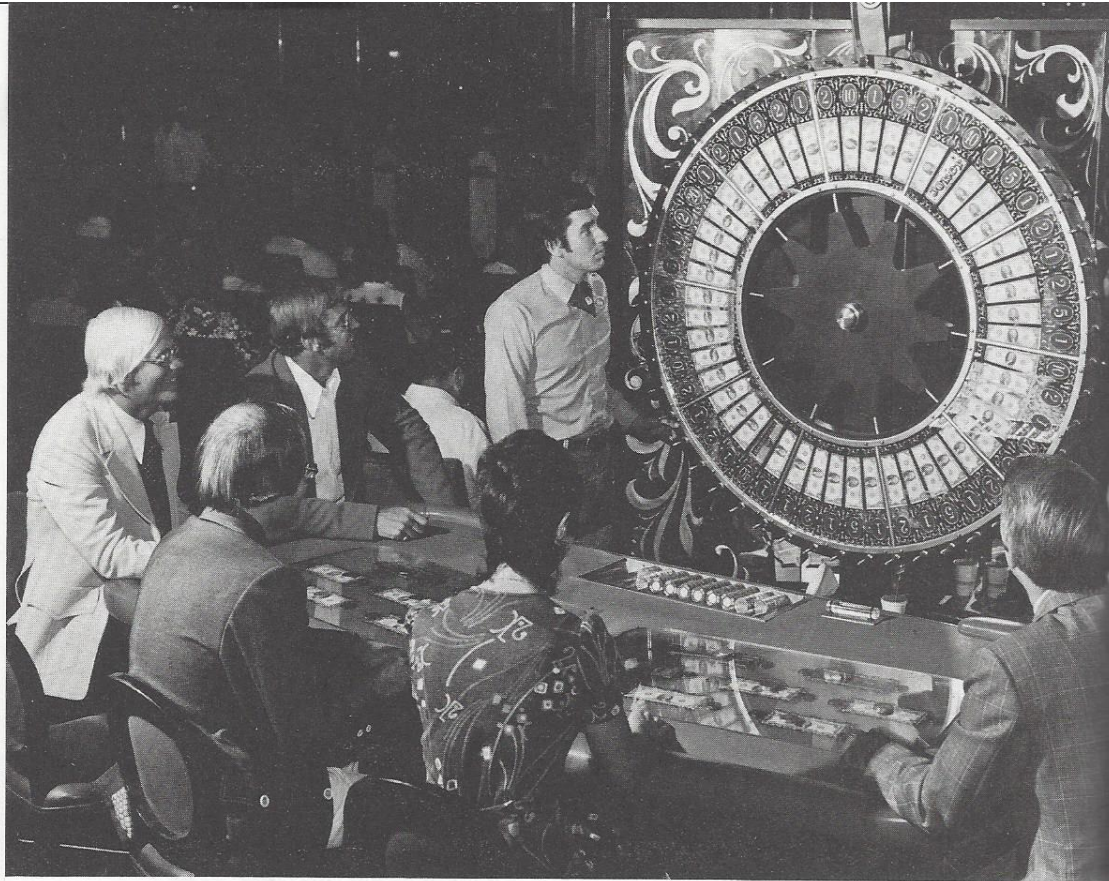
If we cover each of the 7 betting spaces with a \$1 bet, spin the wheel 50 times and assume that each of the 50 sections wins once, we will wager \$7 on each spin for a total of \$350.

The wheel stops at the \$1 bill 22 times and we take down \$44.

It stops at the \$2 bill 14 times and we take down \$42.

It stops at the \$5 bill 7 times and we take down \$42.

It stops at the \$10 bill 3 times and we take down \$33.



Money Wheel in action in a plush Las Vegas Strip casino. (Allen Photographers, Inc.)

It stops at the \$20 bill 2 times and we take down \$42.

It stops at the flag once and we take down \$41.

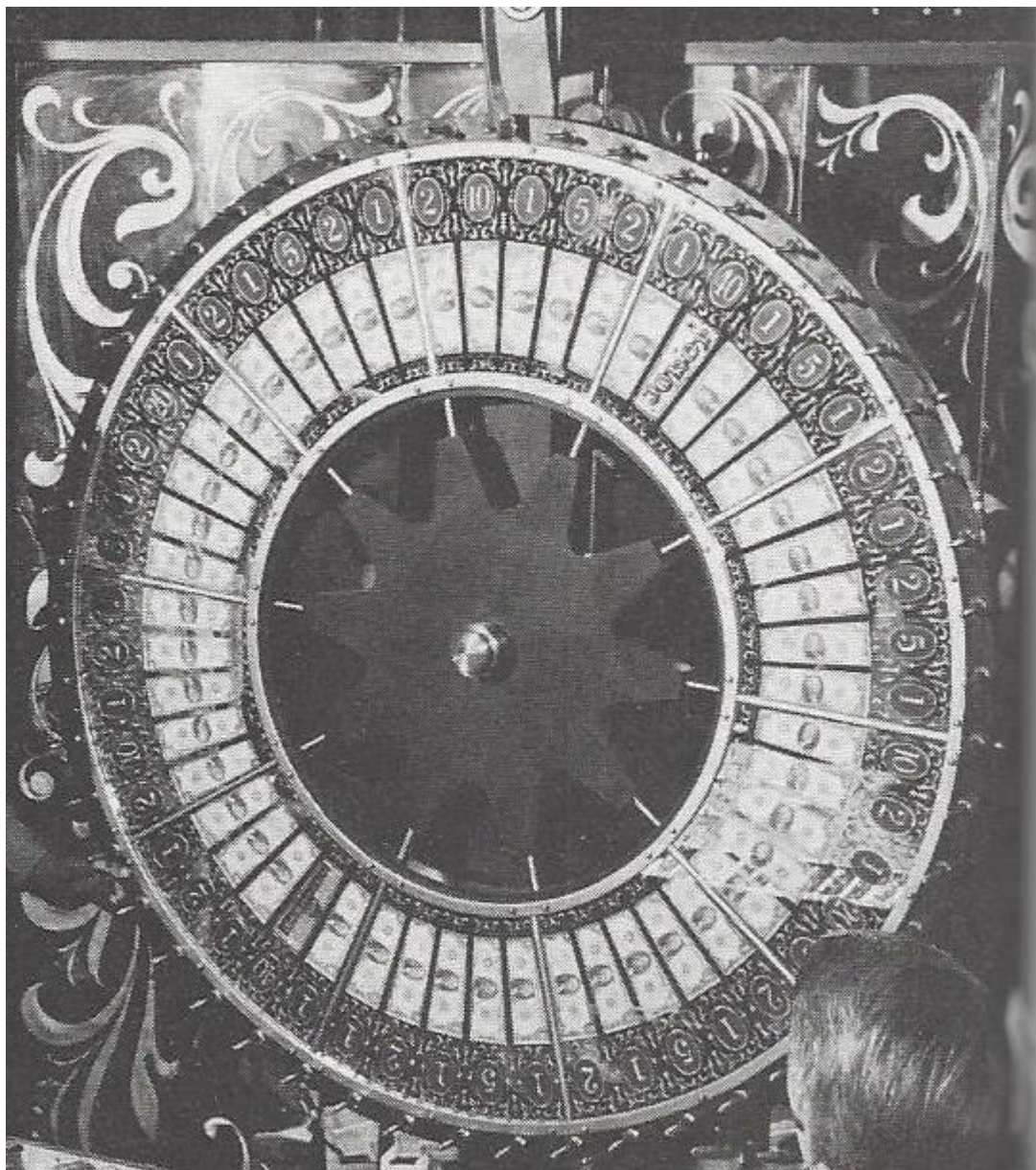
It stops at the joker once and we take down \$41.

Our winnings add up to \$285. We subtract this from the total \$350 wagered and get a loss of \$65. Divide this \$65 by the \$350 total wagered and we find that the operator has a percentage in his favor of $18 \frac{4}{7}\%$, or, in decimals, $18.57+\%$.

There are other types of money wheels. All are basically the same in structure and method of operation, but some give the operator a greater favorable percentage. This runs from a low 18% to a high of 30% or more.

THE RACEHORSE WHEEL

The Racehorse Wheel is very much like the Big Six and the Money Wheel. The number of sections on the wheels varies, with layouts to correspond, and the sections bear pictures of racehorses and numbers



(Close-up of image on p. 504)