Games, puzzles and related recreations have for centuries provided people with pleasant and harmless ways of passing their time. In an age of increasing leisure, however, even the most stimulating pastimes grow boring. Hence, the need for new and different forms of recreation continues to grow.

I present in this article a totally new form of recreation. Although it was designed primarily for solitary amusement, it can be readily enjoyed by small groups, as it offers many interesting possibilities as a vehicle for friendly wagering. It is aimed at sports fans, especially those who dote on statistics. In particular, I assert that knowledge of this system may prove to be of great value to men who are forcibly detained under conditions of considerable mental anguish (such as convicts or prisoners of war), or even to ordinary soldiers in a boring environment.

The mental escape which this system offers is available to anyone who has the basic tools of pencil, paper, and a source of words. This preferably will be newspapers, as they offer a limitless variety of fresh combinations of words. However, magazines, books, or even nasty letters from the finance company will do in a pinch. With experience, it is even possible for a reasonably agile mind to practice this recreation without pencil or paper, and wholly with the use of memorized combinations of words, such as song lyrics.

A variety of make-believe games are presented here, including boxing, football, baseball, basketball, and three forms of hockey. (The emphasis on hockey is partly the result of my Canadian background, and partly because the statistical output of hockey is particularly compatible with this system.)

In all of these games, each team is characterized by one or more letters of the alphabet (sometimes, the letters can be identified with the individual players). The play of a game consists of the random selection of a group of words, followed by the extraction of information from these words (by means of the presence or absence of the
team letters, the relative positions of the team letters in the words, and so forth) about the outcome of the game. Sometimes, information about specific activities in the game (such as a hit or a stolen base in baseball) is also generated.

Instead of selecting two teams and playing a single game (or a series of games), it is possible to set up league or tournament play. In league play, each of \( n \) teams plays each other team the same number of times and the winner is the one with the best won-lost record. In tournament play, the \( n \) teams pair off and play, the \( n/2 \) winners of these contests in turn pair off and play, and this process continues until an overall winner is established (here, it is best to make \( n \) a power of two). If \( i \) letters are needed to represent a team, the size of a league or a tournament is limited by the number of letters in the alphabet; that is, the product \( ni \) cannot exceed 26.

It is well known that the normal distribution of letters in English prose is such that some letters occur more frequently than others; that is, there are "star" letters (such as E and T), and those which aren't so fortunate (such as Q and Z). In general, the most exciting play is achieved when the teams are of approximately equal ability. This suggests that high-frequency letters and low-frequency letters should be more or less evenly distributed among the teams. Suppose that one wishes to select \( n \) teams of \( i \) letters each. Select from the first team of \( i \) letters, making sure that each letter is \( n \) or more letters away from its nearest neighbor (for example, if \( i \) is 3 and \( n \) is 4, select OMK). Select for the next team the three letters immediately to the left (NLJ) or to the right (SUQ). Proceed in a similar manner until all teams have been chosen. If less well-balanced teams are desired, select them using random prose -- the first letter is given to the first team, the first of the remaining 25 letters to appear is given to the second team, and so on; all \( n \) teams are given their first letters before the first team is given a second letter.

Although many games tend to end in a predictable fashion, there are plenty of startling upsets. In all, the whole pattern of the results bears a very close resemblance to the results of the games which are being simulated.

It is my aim to present the principles of this system, and to describe those games which offer the most enjoyable entertainment. I have tried to avoid unnecessary detail, in the belief that once the basic principles are understood, interested players will have no difficulty in modifying or expanding the system to meet their own needs.
The first version of hockey involves teams consisting of three letters. A single game is played on a group of 36 words, each of which represents a scoring attempt. A goal is scored if:

- the defending team (the team with fewer letter appearances in the word) has no letters in the word, and the attacking team has two or more letters in the word, or
- the defending team has one letter in the word, and the attacking team has four or more letters in the word, or
- the defending team has two letters in the word, and the attacking team has six or more letters in the word, and so on.

The goal is credited to that letter of the attacking team which appears most frequently in the word. If another letter of the attacking team is present in the word, it is credited with an assist. If two or more letters appear with equal frequency in the word, the goal is credited to the letter whose presence clinched the goal. For example, if the goal is scored on a two-letter to zero-letter situation, the letter which appeared second in the word would get credit for the goal, and the other letter would receive an assist. If neither of these last two rules is applicable, then the letter which has made all its appearances first is credited with the goal, and the others are assists.

For example, assume that we select teams ACE and FRs, and use the following newspaper clipping as a source of words:

If there exists anywhere a French wine that does not appear in this book, it must be an obscure one indeed. This is the latest revised edition of an encyclopedia of French wines and the vines from which they are made . . .

Goals are made by E (unassisted) on the word indeed and E (from C and A) on the word encyclopedia; team ACE wins, 2 - 0. As a further illustration, select teams DIL and NOT and play another game on the same 36 words. Goals are made by T (unassisted) on that, O (from N and T) on not, O (unassisted) on book, N (from O) on one, and D (from I) on revised; team NOT wins, 4 - 1. This game allows the keeping of statistics for assists as well as for goals. Note that eight teams can be formed in a league or a tournament.

If a hockey team is represented by one letter instead of three, the possibilities for league or tournament play are greater; for example, 2 eight-team or 3 six-team leagues can be formed (one should avoid using the low-frequency letters as teams). The second version of hockey uses one-letter teams and a game consisting of fifteen words (three to a period). A goal is scored for each word in which one of the letters predominates.
For example, assume that a game is played between A and T, and that the following newspaper clipping is the word source:

It is becoming more and more apparent that the back of the bear market has been broken...

T scores immediately on it and takes a 1-0 lead. As the first period draws to a close, A ties the score on and. In the second period, A scores on apparent, T scores on that and the, and A scores on back to tie the game, 3-3. In the third period, A goes on to win, 5-4. Had the game been tied at the end of the third period, additional words could have been used as overtime until the tie was broken.

The solitary player may gain added enjoyment by giving the names of cities to the teams -- for example, Atlanta and Toronto.

In the third version of hockey, each team consists of five letters (one for each player excluding the goalie), and a game consists of only three words. A goal is scored each time a letter is present. For example, if one team is ABCDE and the other is FGHIJ, a game played on the words the discovery of results in a 4-3 score; a second game played on oil on the results in a 1-2 score; a third game played on Alaskan North Slope results in a 4-1 score.

**Football**

The best form of football involves single-letter teams. A game consists of twelve words (three to a quarter), with an auxiliary supply of words to be used for conversion attempts.

A touchdown (6 points) is scored when the attacking letter is present in a word but the defending letter is not. If the defending letter is present, the number of times which the attacking letter appears in the word must exceed the number of appearances of the defending letter by at least two. A conversion (1 point) is scored if the letter which is attempting the conversion is present in a supplementary group of three words, and is not outnumbered by the defending letter in these three words. A field goal (3 points) is scored when both letters are present in a word, but when there is exactly one more attacking letter. When both letters are present two or more times in a word, but the number of appearances is equal, a safety (2 points) is scored by the letter whose appearances were completed first. Canadian football also provides for a rouge (1 point); when both letters make a single appearance in a word, the letter which appeared first is credited with the rouge. (For those who are unaccustomed to Canadian scoring, the rouge may be eliminated.) If the player has a taste for higher-scoring games, sixteen words can be used instead of twelve.
For illustration, we play a game between H and R, using the first sentence of the quotation on French wines for the game, and the second sentence for conversions. H scores a rouge (1 point) on there; H scores another rouge on anywhere; R scores a rouge on French; H scores a touchdown on that (and the conversion is successful on this is the); R scores a touchdown on appear (and the conversion is successful on latest revised edition). The game ends 9 - 8 in favor of H.

Baseball

It is fitting that baseball, the statistician's game, should adapt so well to this system. The best version involves nine-letter teams, one letter for each team member. It is up to the player to determine the most advantageous batting order for the nine letters prior to the start of the game.

Each.bat consists of a word. If the letter at bat is present in that word, it obtains a hit. If the letter is present twice, it is a double. A triple is scored when a letter appears twice but in a back-to-back fashion (as in the word ball). If the letter is present three times in the word, it is a home run. If a letter does not get a hit, it is out, provided that one of the letters from the opposing team is present in that word. If no letter from the opposing team is present, the batter receives a walk, and an error is charged against the opposing team. Credit for a put-out is given to the first letter on the opposing team to appear in the word in which the out was obtained.

Baserunners may advance in several ways. A walk will advance any baserunner in the normal fashion. A hit will advance any runner by one base more than the value of the hit; i.e., a single will advance a runner by two bases, and a double will advance a runner by three bases. If the baserunner letter is present in a word when his team is at bat, he is credited with a stolen base, provided the appearance of the letter occurs before the third out, or before the letter which is at bat obtains a hit. (Consider the batting order IL and the words ice milk. I receives a single on the first word, steals second on the second word, and then scores on L's single. Had the second word been slide instead, I would not have stolen second but would have advanced from first to third on L's single.)

If the at bat letter is out (provided that it is not the third out), and if the at bat letter is present in the preceding word, the base-running letter may advance one base. This is roughly equivalent to a sacrifice or a fielder's choice. The letter at bat can be credited with a RBI should the runner score. (Consider the batting order LA
and the words all the time. L triples on all; A is out on the, but the presence of A in all enables L to score provided that A is not the third out of the inning.)

For illustration, we play part of a game using the batting orders CADEILHMF and UTONSRWYP, and the following source of words:

Choosing The Skis That Are Right For You: For your first few times on the snow, almost any ski will do ...

In the top of the first inning, C singles on choosing, A is out on the, D is out on skis, and E is out on that: no runs, one hit, no errors. In the bottom of the first inning, U is out on are, T singles on right, O singles on for (T advancing to third), N walks on you (after O steals second), S is out on for, R singles on your (T and O score, N advances to third), and W is out on first: two runs, three hits, one error. In the top of the second inning, I is out on few, L is out on times, and H is out on on: no runs, no hits, no errors. In the bottom of the second inning, Y is out on the, P walks on snow, U is out on almost, and T is out on any: no runs, no hits, one error. Box scores and game scores are very realistic.

Basketball

This is best played with five letters on a team; a game consists of forty words. Two points are scored each time one of the letters appears; a bonus of one point is scored when a letter appears more than once in any word.

Assume that team ABCDE plays team KLMNO, and that the same clipping is used as before:

Choosing The Skis That Are Right For You: For your first few times on the snow, almost any ski will do -- ideally, not more than three to six inches taller than you are. In fact, if you start with a ski that barely reaches to your chin . . .

The final score is 59 - 74; individual scorers are A = 24, B = 0, C = 8, D = 2, E = 25; K = 4, L = 17, M = 4, N = 18, O = 31.

Boxing

This uses individual letters as boxers. Rounds consist of three words. The letter which predominates in the three words wins the round. A knockout is scored whenever a letter is present four times in one round.