An historical study of the pole vault

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AN HISTORICAL STUDY
OF THE POLE VAULT

A Thesis
Presented to
the Faculty of the Department of Physical Education
College of Pacific

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Ray Frederick Kring
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CHAPTER I

I. INTRODUCTION

The pole vault is an event performed in track and field athletics wherein the athlete, with the aid of a pole 14 to 16 feet in length, attempts to clear a crossbar resting on two pegs supported by two standards. The standards, or uprights, are placed not less than 12 feet nor more than 13 feet apart. The vaulter cushions his fall in a pit filled with shavings. The object of the event is to vault higher than your competitors.

The pole vault is the most complicated and technical of all track and field events. Many years are required to master the techniques necessary to become a champion vaulter. The action is so fast, with no more than 1.3 seconds from take-off to bar clearance, that there is little time to adjust for error. And during this short span of time, the athlete performs over a dozen different muscle movements.

It has been said that the successful pole vaulter must possess many physical and mental attributes. He must have the speed of a sprinter, the strength of a weight man, the spring of a high jumper, the endurance of a distance runner, the balance of a gymnast, and the courage of a boxer. He must possess the determination to stick with it through
many failures, for success in this sport does not come easily.

Each time a champion pole vaulter performs, you may be assured that many hours of work have gone before. Many hours of toiling in the hot sun with aching muscles, perspiration stinging his eyes, and his elbows and knees raw from the frequent hard, long drops into the pit. But it was a labor of love and you can be envious of that pole vaulter. For probably in no other field of sport is the satisfaction so great, or the thrill so keen and lasting, as that derived from the accomplishment of clearing a new height in the pole vault.

Today, better than average high school pole vaulters clear between 12 and 13 feet. A good college vault is anywhere from 13 feet 6 inches to 14 feet 6 inches, while for international competition the vaulters will clear 14 feet 6 inches and higher. This was not always the case, however. For we shall see how the best marks of fifty years ago were a full three feet below today's vaults. The purpose of this study is to trace the progress made in the pole vault since man first learned to propel himself upward with the aid of a pole; and to give a year by year account of the best vaults made since the first years of competition.

This study will also present the evolution of techniques employed in pole vaulting, the equipment changes, and
the extent of their influence on the progress made in the records of this sport.

DEFINITION OF TERMS

RUNWAY: A narrow lane, three to four feet wide, with a surface of dirt, grass or asphalt, that the vaulters run down in making their approach to the pole vault pit. The minimum length should be 125 feet.

PIT: An area 16 feet by 12 feet, piled high with wood shavings to cushion the vaulter's fall.

CROSSBAR: A bar of wood or metal, which the pole vaulter attempts to clear. The bar is of uniform thickness, either square with beveled edges or triangular in form. If square, the dimensions of the bar shall be 1 1/8 inches in thickness; and if triangular, 1 3/16 inches over each face.

POLE PLANT: That part of the vault when the pole vaulter slides his pole into the box just prior to taking off.
CHAPTER II

ANCIENT AND EARLY HISTORY

Although very little has been written about pole vaulting in ancient times, it is evident from paintings found on vases taken from excavations that the art of leaping with a pole was known to the Greeks. The fact that the Greeks were familiar with the general principles of pole vaulting is further born out by Guts Muths in a passage from the ancient writings of Greece.

Nestor, to avoid the charge of the wild beast, placed his spear in position and, with great effort leaped into the branches of a nearby tree, then, secure in his position, he looked down on the enemy he had escaped.1

According to Cromwell, the Greek word for pole vaulting is translated literally as spear high jump.2 Gardiner also makes some reference to the event in his book, when he says:

Nor is there any evidence for the pole jump. The poles so frequently represented on the vases are merely blunt spears used for practice. A pole or spear was used, as we have seen, in vaulting on horseback, but not

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as far as we know for jumping. 3

It seems then, that although the principle of pole leaping was understood by the Greeks of ancient times, it was not seen fit by them to place it as an athletic event into their Olympic Games. It is interesting to note that in Gardiner's book, a photograph of a vase shows a youth preparing to vault onto the back of a led horse, and he is grasping the pole in exactly the same manner as would a modern day pole vaulter.

After these ancient times came the dark ages, and there is a lapse of almost eight centuries before any mention of the pole vault can again be found. This could be considered one of the great mysteries of history. Perhaps one of the reasons for the absence of pole vaulting, or for that matter, any athletic competition, was the state of wars, violence, and confusion that existed throughout the world during the medieval times. 4

However, during the Middle Ages, a form of vaulting was used by professional runners who were employed as messengers. These messengers, or heralds, often carried long

stout staffs which served them in two ways. As Ramy B. Deschner in his interesting book, The Evolution of Sports, says:

One end of the staff was cleverly contrived to hold "emergency rations" -- a few ounces of wine, and a bit of bread and cheese. Primarily, however, the staff was used to assist the runner in vaulting obstacles in his path -- for in those days of poor roads and widespread brigandage, a cross-country route often proved not only quicker, but considerably safer. And here, in the Medieval runner, we find the predecessor of the modern . . . pole vaulter . . . .

Guts Muths, in 1792, published a book entitled Gymnastik für die Jungend, in which he had the following to say about the pole vault.

An indifferent leaper cannot pass a bar higher than himself; he may be said to leap well who is capable of clearing a bar as high as he can reach with his finger-tips; but many learn to exceed this. Hence we have a standard for classing leapers. I have seen many boys and youths leap over a bar from 2½-3 feet 2 inches higher than their own heads, and one of five feet two inches high clear a bar eight feet from the ground.

From this statement one may gather that some of Guts Muths' students vaulted well over 9 feet; and this was ten years before the start of the nineteenth century. However, the Encyclopaedia Britannica feels that it was after the start of the nineteenth century:

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As a sport, pole-vaulting made its appearance in Germany in the first part of the nineteenth century, when it was added to the gymnastic exercises of the Turner by Johann C. Guts-Muths and Frederich L. Jahn.  

In any event, German youths coached by Guts Muths, were clearing heights in excess of eight and nine feet at least seventy years before vaulting became an athletic contest anywhere else in the world.

II. THE BIRTH OF TRACK AND FIELD IN ENGLAND

About the only sports practiced regularly in England during the early part of the nineteenth century were horse racing and wrestling. Very little was done in the way of track and field, as we know it, until 1812, when the Royal Military College at Sandhurst inaugurated modern athletic sports. However, the example was not followed until about 1840, when Rugby School, Eton College, Harrow School, Shrewsbury Royal School, and the Royal Military Academy of Woolwich, came to the front.

The term "athletic sports" did not come into use in England until 1863. Until about 1860, all exercises wherein the feet played the principal part were, logically enough,

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called "pedestrianism." 9

The first intercollegiate meet held anywhere in the world was the Oxford versus Cambridge affair of 1864. 10

Descriptions of events in athletic meetings of that time class the events into two general parts: running and leaping.

The Encyclopaedia Britannica of 1878 goes on to say:

Leaping may be divided into three principal heads, viz., running high-leaping, running wide-leaping, and running pole-leaping, which are found to be included in nearly every athletic programme. Vaulting, too, is sometimes practiced, but belongs rather to the gymnasium than the outdoor athletic arena. 11

It may be assumed here, that their use of the term, "running pole-leaping" is a description of the pole vault event as we think of it, and that their use of the word "vaulting" is a reference to gymnastic events such as our modern side-horse.

The first large scale practical use of pole vaulting can be traced to the marshy provinces along the North Sea and the Fens of Cambridgeshire, Huntingdonshire, Lincolnshire and Norfolk. Because of the many canals that ran through the country at right angles to each other and because of the distance between bridges, a stack of poles were kept at each

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9Ibid.
10Ibid.
11Ibid., p. 13.
house to use in vaulting over the canals.\textsuperscript{12} This probably
gave rise to the event of leaping-with-a-pole for distance
instead of height. In America this event was contested as
late as 1910.

Gradually the change took place from leaping for
distance to leaping for height, and the latter event was
added to the athletic programs of England in the 1860's.

The first world record holder in the pole leap, or
pole vault, was J. Wheeler with a height of 10 feet set in
1866.\textsuperscript{13} R. J. C. Mitchell, in 1868, raised Wheeler's mark
to 10 feet $6\frac{3}{4}$ inches.\textsuperscript{14} To be very technical, these early
performers should not be called vaulters, but rather climbers,
inasmuch as they actually climbed the pole. Webster, in his
book, gives a good description of their technique.

The method employed by the Ulverston men was unique,
and for many years the world's record holders came from
that small town. Their poles were of ash or hickory,
long and heavy, and shod at the lower end with a tripod
of iron, forming a three-inch triangle. The weight of
the pole necessitated a wide separation of the hands and
a slow run-up. At the end of the approach run the tripod
was planted some three feet in front of the cross-bar.
The athlete then allowed his body to swing up and began
to climb. The upper hand was shifted a foot up the pole
and the lower hand brought up to it. The climbing con-
tinued until the pole passed the vertical position. As
it began to fall forward, the athlete drew up his knees

\textsuperscript{12}Encyclopaedia Britannica (11th ed.), loc. cit.

\textsuperscript{13}H. Archie Richardson, Archie's Little Black Book

\textsuperscript{14}Ibid.
and went over the bar in a sitting position, a last backward push preventing the pole from following through to remove the bar.15

Also at about this time, organized track and field got its start in Japan. A letter from Mr. Mikio Oda, 1928 Olympic hop-step-and-jump champion from Japan and incidentally the Orient's first gold medal winner in Olympic competition, mentions the beginning of the sport in the Far East.

In 1873, an Englishman came to Japan and introduced track and field, and it has been said that in a field day held at the Naval Academy (then in Tokyo) in 1874, pole vault was included in the day's program.16

E. Woodburn of the Ulverston Cricket Club in England was the next man to hold the world record. In 1874 he broke Mitchell's mark by half-an-inch with a leap of 10 feet 7 inches.17

Woodburn's record stood for only three years as H. E. Kayall set a new world standard by scaling 10 feet 9 inches.18 This was during the year 1877 and brings us up to the beginning of track and field in America.

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16Letter from Mr. Mikio Oda, Tokyo, Japan, August 8, 1958.
17Webster, loc. cit.
18Richardson, loc. cit.
CHAPTER III

I. EARLY DAYS IN AMERICA

There is some evidence that during the mid eighteenth century the gentlemen of America were accustomed to compete against each other in manly games. It has been further recorded that George Washington beat all his opponents at the running broad jump.¹ And it is said that he leaped over 22 feet.

There were a few professional runners that would tour the country and engage in contests with local town champions. Large sums of money would be wagered on the outcome of the race. The professional runner and his confederate would pick up the purse, for likely as not he would win, and then move on to the next town.

The first great American sprinter was George Seward of New Haven, Connecticut, and in 1844, according to F. A. M. Webster, "made some remarkable records."² Webster goes on to say that there was also Billy Jackson, known as the "American Deer," and in 1863 the British Isles were visited by L. Bennett, a full-blooded Seneca Indian whose pseudonym was

¹Webster, op. cit., p. 18.
²Ibid., p. 19.
"Deerfoot" and who was said to have run twelve miles in one hour, two minutes, and two and one-half seconds.3

However, until shortly before the Civil War there was little general athletic interest in America. Boating was perhaps the only sport that possessed any rules and permanent organizations. With the coming of the war between the states in 1861, interest in athletics again slowed down. After peace was established, athletics appeared to take roots once more and from 1870 to 1879 there was rapid increase in interest and general organization.4

The New York Athletic Club was the pioneer of organized track and field in America. The N.Y.A.C., as it is referred to, was founded on September 8, 1868 and on November 11 of that same year, at the Empire Skating Rink located at 63rd Street and 3rd Avenue in New York City, the Amateur Indoor Athletic Games were held.5 This was the first organized track and field meet ever held in America. Three years later, on October 21, 1871 at its grounds at 130th Street and Harlem river, the New York A. C. held its Amateur Outdoor Athletic Games.6

3Ibid.


6Ibid.
During these early days there was no doubt some form of track and field competition on an informal level was being held on the campuses of the Eastern colleges and universities. The first intercollegiate championship track event was held in conjunction with the Saratoga Rowing Regatta at Saratoga, New York. There was a mile run and a 100-yard dash on the program and it was open to the eleven colleges competing in the regatta. Bob Kane, in his interesting book on Cornell athletics, makes the following mention of this early track endeavor of 1874.

Cornell sent its two star runners, Isaac Bucklin Potter and Ernest R. Copeland, along with the crew, to take part in the Saratoga Regatta and Footraces. Cornell took fifth in the crew race, won by Columbia. On the following day at Glen Mitchell, Copeland won the mile race after a tight dual with J. H. Vandewater of Princeton. The time was 4:58. A. B. Nevin of Yale nosed out Potter of Cornell in the 100 yards when "Ibex" was forced to run through a mudhole. The time was 0:10.8.

In 1875 the Intercollegiate Association of Amateur Athletes of America, I.C.A.A.A.A., was formed. This organization was founded for the purpose of fostering track and field athletics in the colleges, and was the first organization for the control of intercollegiate athletics in the

7"Introduction to the History of the I.C.A.A.A.A."

8Bob Kane, 40 Years at Cornell (A booklet published by Cornell University, 1940), p. 3.
United States. On July 20 and 21, 1876, the first I.C.A.A. A.A. meet was held at Saratoga, New York. Also that same year, the first U.S.A. Championships were held, organized by the New York Athletic Club.

These two championship meets did not include the pole vault on their list of events; however, it was added to the program of both meets the following year. G. McNichol of the Scottish-American Athletic Club was the first U.S.A. Championships winner in the pole vault at 9 feet 7 inches and had the best height in America for the year 1877. I.C.A.A. A.A. winner that year was J.W. Pryor of Columbia with a height of 7 feet 4 inches. As mentioned in the previous chapter, during the season of 1877 H.E. Kayall of England set a new world record by clearing 10 feet 9 inches.

At the Civil Service Sports meet of 1878 in England, H.W. Strachan of the London Athletic Club won the pole

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10 Joseph Kane, op. cit., p. 459.
14 Richardson, loc. cit.
leaping contest at 10 feet 6 inches and beat his brother, E. A. Strachan, who cleared 10 feet 2 inches.\(^{15}\) These two marks were the best in the world for that year.

Also in the year 1878, the pole vault was part of the program of the field day held at the Agricultural School in Hokkaido, which is a Northern island of Japan. The record shows that 9 feet 9 inches was cleared on that day.\(^{16}\) The best vaulter in the United States that year was A. Ing of the Scottish-American A. C. Ing won the national title with a leap of 9 feet 4 inches.\(^{17}\) C. Fabrogou of City College of New York was I.C.A.A.A.A. champion at 9 feet even.\(^{18}\)

The year 1879 produced the first really great American champion in the pole vault. His name was William J. Van Houton and he too competed for the Scottish-American A. C. He won the American Championships with a vault of 10 feet 4 and 3/4 inches.\(^{19}\) This was the first U. S. A. Championship sponsored by the newly formed National Association of Amateur Athletes of America.\(^{20}\)

\(^{15}\)Webster, op. cit., p. 229.
\(^{16}\)Letter from Oda.
\(^{17}\)A.A.U., loc. cit.
\(^{18}\)I.C.A.A.A.A., loc. cit.
\(^{19}\)A.A.U., loc. cit.
\(^{20}\)Ibid., p. 81.
The amazing thing about this early champion, Van Houton, was the fact that he used the same basic style as the vaulters of today with the exception of some of the finer points of technique. He knew nothing about the hand shift, nor did any of the other vaulters of the time. Being a small man, Van Houton could use a very light pole and hold his hands close together. Inasmuch as he did not shift his hands, by having them close together he was able to pull with two hands and achieve the same effect as do vaulters today. The other vaulters of that period used various styles, none of which were very scientific. They all gripped the pole with the upper hand at least three feet higher than the vaulters of today in attempting the same height. Most vaulters in 1879 used the orthodox method of grasping the pole with both thumbs pointing to the top of the pole. Some of these early day vaulters, however, actually carried the thumb of the right hand up and the thumb of the left hand pointing toward the bottom of the pole. In all cases, they pulled with the upper hand only and used the lower hand simply as a prop.21

William J. Van Houton, then, can be said to be the true father of American pole vaulting and the first great contributor

Another top vaulter of the year 1879 was F. H. Lee of Columbia University who was intercollegiate champion with a new I.C.A.A.A.A. record of 9 feet 3 inches.22

In the year 1880 the United States was still a young and growing country. General George Custer and "Wild Bill" Hickok had been dead only four years, while the American flag had only 36 stars on it.23 During that year of 1880, W. J. Van Houton set a world record in the pole vault with a leap of 10 feet 11 inches; he became the first American to hold the world standard.24 R. B. Tewksbury of Princeton University set a new I.C.A.A.A.A. mark at 9 feet 4 inches,25 and the first recorded vault on the Pacific coast was established that year. The Stockton Daily Evening Herald of Friday, May 7, 1880, tells about the local Caledonian Games and reports the results in this manner: "Vaulting with a pole--Thomas Cunningham of Sacramento, 1st prize--Dressing Case--8 feet 3 inches."26

Van Houton was again the top vaulter of 1881, winning the American Championship at 10 feet 6 inches;27 in so doing

22I.C.A.A.A.A., loc. cit.
24Richardson, loc. cit.
26Stockton Daily Evening Herald, May 7, 1880.
27A.A.U., loc. cit.
he defeated one Hugh H. Baxter of the New York A. C. More will be heard of Baxter in the years to come. The I.C.A.A.A.A. champion of 1881 was F. W. Dalrymple of Lehigh University with a mark of 8 feet 9 inches. An Englishman by the name of Tom Ray was said to have cleared 11 feet 3 inches that year.

It is interesting to note that during this time, the track season for the most part consisted of only two meets; the American Championships and the Intercollegiate Championships. Dual meets as we know of them today were practically unheard of.

1882, the year the Panama Canal was begun by France, saw E. F. Richardson of the Scottish-American A. C. win the National meet with 10 feet even, to become the best vaulter of the year, and W. Soren of Harvard won the Intercollegiates at 9 feet 6 inches. The latter height was a new I.C.A.A.A.A. record.

Hugh H. Baxter of the New York A. C. startled the sporting world of 1883 by clearing 11 feet in the vault. He accomplished this feat in the American Championships with a

29 Webster, loc. cit.
30 World Almanac, loc. cit.
31 A. A. U., loc. cit.
leap of 11 feet \( \frac{3}{8} \) inch for a new world record, and in so doing, defeated Van Houton. Van Houton then dropped out of competition and his unique form was not to be seen again for fifteen years.

From this time until his retirement in 1895, Hugh Baxter was beaten but once. This one defeat was at the hands of an English pole climber and will be discussed later. Henry F. Schulte, the famed Nebraska track coach, has this to say about Hugh Baxter:

As a pole vaulter Mr. Baxter may be said to have been the greatest vaulter who ever gripped an ash pole. He won more national championships than any other vaulter in the annals of American sport, and considering the introduction of the bamboo pole--a positive help--with the strides that have been made in the techniques of pole vaulting, Mr. Baxter's 11 feet 5 inches made in 1887, would undoubtedly be equal to 13 feet 6 inches today. An idea of Mr. Baxter's pole vaulting ability can be gained from the fact that his 11 feet \( \frac{3}{8} \) inch that won the national championship in 1883 was surpassed only 3 times in the next twenty-two years.\(^{34}\)

Other top vaulters of the year 1883 were H. P. Toler of Princeton, with an I.C.A.A.A.A. record leap of 10 feet,\(^{35}\) and Welby of Cornell, with 7 feet 1\( \frac{1}{2} \) inches.\(^{36}\)

Again in 1884 Baxter was the number one vaulter, winning the American Championship at 10 feet 6 inches,\(^{37}\) while

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\(^{33}\)Richardson, loc. cit.  \(^{34}\)Schulte, loc. cit.

\(^{35}\)I.C.A.A.A.A., loc. cit.

\(^{36}\)Bob Kane, op. cit., p. 5.

\(^{37}\)A. A. U., loc. cit.
H. L. Hodge of Princeton was winning the intercollegiate championship at 9 feet.\textsuperscript{38} Baxter vaulted 10 feet 3 inches in 1885,\textsuperscript{39} and L. D. Godshall of LaFayette College cleared 9 feet 7\frac{1}{2} inches.\textsuperscript{40}

Although Baxter was again American champion in 1886, he did not attain the best mark of the year. A. Stevens of Columbia had the best height with a new intercollegiate mark of 10 feet 3\frac{1}{2} inches,\textsuperscript{41} while Baxter cleared only 10 feet 1\frac{1}{2} inches.\textsuperscript{42}

The year 1887 was the first year that a non-American won the American Championship in the pole vault. Tom Ray of Ulverston Cricket Club of Ulverston, England, defeated Baxter in the American Championship meet and set a new American record of 11 feet 3/4 inch. Before returning home, the British pole climber raised the record to 11 feet 2 inches, and then to 11 feet 4\frac{1}{2} inches.\textsuperscript{43} However, later in the year Baxter established a new American and world record by clearing 11 feet 5 inches.\textsuperscript{44}

\textsuperscript{38}I.C.A.A.A.A., \textit{loc. cit.}
\textsuperscript{39}A. A. U., \textit{loc. cit.}
\textsuperscript{40}I.C.A.A.A.A., \textit{loc. cit.}
\textsuperscript{41}\textit{Ibid.}
\textsuperscript{42}A. A. U., \textit{loc. cit.}
\textsuperscript{43}Schulte, \textit{op. cit.}, p. 172.
\textsuperscript{44}Richardson, \textit{loc. cit.}
The third best vaulter of 1887 was Godshall, who retained his title as intercollegiate champion with a leap of 10 feet.\(^{45}\)

In 1888 E. L. Stone and Tom Ray cleared 11 feet ½ inch in the English Championships,\(^{46}\) while in the United States, two national championships were held that year. The A.A.U., or Amateur Athletic Union, was formed that year; their championship meeting, held in Detroit, was won by Godshall, the LaFayette College vaulter competing for the Manhattan A. C. of New York. His winning height was 10 feet. The N.A.A.A.A. died after 1888 and their last pole vault title was won by G. P. Quinn of the University of Pennsylvania with a mark of 10 feet 1 inch.\(^{47}\)

The intercollegiate title that year was won by T. G. Shearman, Jr., of Yale University with a leap of 9 feet 6 inches.\(^{48}\)

Also in 1888, pole leaping was becoming popular on the Pacific Coast. The best vaulter was James Sexsmith of The Olympic Club of San Francisco, who had a top mark of 9 feet. The Daily Examiner of Monday, May 7, 1888, had this to say about Sexsmith:

\(^{45}\)I.C.A.A.A.A., loc. cit. \(^{46}\)Webster, loc. cit. 
\(^{47}\)A.A.U., loc. cit. 
\(^{48}\)I.C.A.A.A.A., loc. cit.
James Sexsmith does not appear to be improving at pole vaulting. He was defeated at the University Games on Saturday, vaulting only 8 and 4/5 feet, while on the 22nd of February he leaped over the string placed 9 feet above the ground.49

Other top vaulters in San Francisco that year were C. J. Schuster of The Olympic Club and J. B. Tibbatts, each with heights of 8 feet 6 inches.50 The record for the Coast at that time was 9 feet 1 inch.51

The year 1889 will be remembered as the year of the Jamestown flood;52 it was also the year of significant rule changes in the pole vault. E. L. Stone, another English "pole climber," visited the United States and won the American Championship with a leap of 10 feet.53 After Stone's victory the question was brought out of barring this style,54 on the grounds that it was an acrobatic feat requiring neither strength nor endurance but simply balancing ability. After consideration the style of "pole climbing" was barred by American rules, and the following rule was written into the rule book where it appears today:

49The San Francisco Daily Examiner, May 7, 1888.
50Daily Examiner, April 23, 1888.
51Ibid.  
52World Almanac, loc. cit.
53A. A. U., loc. cit.
54For a description of pole climbing, see page 9.
No competitor shall, during his vault, raise the hand which was uppermost when he left the ground to a higher point on the pole, nor shall he raise the hand which was undermost when he left the ground to any point on the pole above the other hand.\textsuperscript{55}

One rule that appeared in the rule book of that time that is no longer applicable is the following:

A line shall be drawn 15 feet in front of the bar parallel therewith, and stepping over such line, to be known as the balk line, in any attempt, shall count as a balk. Two balks count as a try.\textsuperscript{56}

The top mark of 1889 was turned in by R. G. Leavitt of Harvard University at 10 feet 5\textsuperscript{1/2} inches,\textsuperscript{57} although Stone climbed 11 feet 7 inches in England.\textsuperscript{58} Also that year another mention of vaulting on the Pacific Coast is found in an article from the May 31, 1889, edition of the \textit{San Francisco Daily Examiner} which describes the Amateur Championship Games held at 14th and Center streets in Oakland, California, as follows:

\textbf{Pole Vault:}

For this event there were eight entries but only three contestants put in an appearance. They were John Purcell, E. A. Kolb and C. J. Schuster, all of the Olympic Club. Kolb went out early, and after raising the bar to 8 feet 5 inches Purcell won; Schuster being unable to raise it over 8 feet 3 inches.\textsuperscript{59}

\textsuperscript{55}I.C.A.A.A.A., 1910, \textit{op. cit.}, p. 29.
\textsuperscript{56}\textit{Ibid.}
\textsuperscript{57}I.C.A.A.A.A., \textit{loc. cit.}
\textsuperscript{58}Webster, \textit{loc. cit.}
\textsuperscript{59}\textit{Daily Examiner}, May 31, 1889.
The best vaults of 1890 were turned in by E. D. Ryder of Yale and H. F. Welch of Columbia, each clearing the bar at 10 feet 7 inches in winning the intercollegiate title. W. S. Rodenbaugh of the Athletic Club of Schuykill Navy, Philadelphia, had the third best height of the year with a leap of 10 feet 6 inches in winning the A. A. U. meet at Washington, D. C.

Ryder again had the best vault of the 1891 season, winning the intercollegiate championship with a new record of 10 feet 9 3/4 inches. T. Luce, of the Detroit A. C., was the A. A. U. winner at St. Louis, Missouri, with a mark of 10 feet 6 3/8 inches.

British champion R. D. Dickinson scaled higher than anyone else before him when he cleared 11 feet 9 inches at Kidderminster, England during 1891. This mark, however, was not recognized in America as it was believed to have been accomplished by climbing.

The summer of 1892 produced two 11 foot vaulters and a new world record. Walter J. Rodenbaugh of Philadelphia broke Baxter's five year old world record by elevating

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60 I.C.A.A.A.A., loc. cit.
61 A.A.U., loc. cit.
63 A.A.U., loc. cit.
64 Encyclopaedia Britannica (11th ed.), Vol. 11, loc. cit.
himself 11 feet 5 3/4 inches above the ground. 65 The other
11 foot leaper of 1892, was Luce, of Detroit, who successfully
defended his A. A. U. title with a leap of 11 feet even. 66

Still during the year 1892, O. G. Cartwright of Yale
was intercollegiate champion at 10 feet 5 3/4 inches, 67 while
George J. Hoffman of the University of California became the
first great vaulter from that institution by establishing a
new Pacific Coast record of 10 feet 4 3/8 inches. 68

No one cleared 11 feet during the year 1893. C. T.
Buchholz of the University of Pennsylvania came close with a
leap of 10 feet 10 1/2 inches in winning the I.C.A.A.A.A. title. 69
Buchholz, vaulting for the B.C.A.A., was also A. A. U.
champion at 10 feet 6 inches. 70

Two other men cleared 10 feet in winning meets in 1893.
They were Vandyke of the University of California, with a 10
foot 1 3/8 inch leap to his credit, and Hoffman, winner of the
Big Meet with Stanford University, at 10 feet. 71 The three
remaining top vaulters of that year were: Crane of Stanford,
9 feet 11 inches, 72 G. McClelland of the Acme Athletic Club

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65 Richardson, loc. cit. 66 A. A. U., loc. cit.
68 Daily Examiner, April 11, 1893.
71 Daily Examiner, April 23, 1893.
72 Daily Examiner, June 11, 1893.
of San Francisco, who was winner of the Pacific Association Championships at 9 feet 10\frac{1}{2} inches, and Conrad of Cornell, with a best height of 9 feet 6 inches.

Buchholz was the top vaulter again in 1894, and repeated as American champion with a height of 11 feet. He also cleared 11 feet 5 inches in practice which would have been a new American intercollegiate record. Two Yale men had the next best height of the year. M. H. Kershaw and H. T. Thomas each cleared 10 feet 10\frac{1}{2} inches. Kershaw was intercollegiate champion at 10 feet 9 inches, while Hoffman of California cleared 10 feet on the Coast.

The poles used by these early day pioneers in pole vaulting were heavy, crude implements. They were made of hickory, white ash, spruce, cedar, or some other tough wood. They were from 13 to 15 feet long and 1 3/4 inches thick at the middle, tapering to 1\frac{1}{2} inches at the ends. The lower end of the pole was cut off flush to prevent sinking into the earth and shod with a single spike to avoid slipping.

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73 Ibid.  
74 Bob Kane, op. cit., p. 10.  
75 A. A. U., loc. cit.  
76 Daily Examiner, May 26, 1894.  
77 Ibid.  
78 I.C.A.A.A.A., loc. cit.  
79 Daily Examiner, April 24, 1894.  
80 Encyclopaedia Britannica, loc. cit.
poles were quite heavy, weighing over 10 pounds, and neces-
sitated a slow run-up. These early day competitors were
hearty souls indeed.

Mr. A. C. Gilbert, early day champion, had the follow-
ing to say about the poles that were used:

All the early day poles used in pole vaulting were made
of hickory, ash or cedar; in fact my first pole was cedar
... The cedar pole that I used was taken from a cedar
fence and worked down to size by draft shave. How the ash
and hickory poles were manufactured, I do not know defi-
nitely, but I understand some of them were actually
turned on a lathe. A. G. Spaulding and Bros. was the
largest supplier. ... Some of these poles I know were
hand made.81

With further reference to the implements of early day
pole vaulting, there was no box or planting hole used into
which the pole was placed in taking-off. As mentioned previ-
ously, spikes were placed at the lower end of the pole to
grip the ground. With regards to spikes, Gilbert says:

When I first pole vaulted back in Moscow, Idaho with
the University boys there, they all used spikes in the
pole. No hole was used at that time to the best of my
knowledge. Various types of spikes were used—some were
turned out of aluminum, some were cast. Some even used,
like myself, a large spike that I drove into the pole
and then cut the head off.82

More vaulters cleared 11 feet or higher during the
year 1895 than any previous year. Three men cleared that

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81 Letter from A. C. Gilbert, New Haven, Conn., July
10, 1958.

82 Ibid.
height, with Buchholz becoming the finest vaulter in the land at 11 feet 3 3/4 inches and breaking his own I.C.A.A.A.A.A. record made two years before. The other two 11 foot vaulters that year were William W. Hoyt of Harvard at 11 feet 2 3/4 inches, and A. H. Culver of Northwestern University at 11 feet. H. T. Thomas of Yale came close to clearing 11 feet, with an all time best of 10 feet 11 3/4 inches, while C. B. Herschberger of the University of Chicago and J. A. Jackson of the University of Wisconsin each cleared 10 feet 6 inches.

About this time dual meets were becoming more popular, and such institutions as Yale, Harvard, Princeton, and Pennsylvania were having annual dual meetings. Also, the University of California was engaging in intersectional meets by traveling across the United States once each spring to meet some of the bigger universities on the East coast.

The revival of the ancient Olympic Games in 1896 marked the beginning of a new era in sports competition. The founder and father of the modern Olympic Games was Baron Pierre de

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83 I.C.A.A.A.A.A., loc. cit.
84 Daily Examiner, May 26, 1895.
85 Daily Examiner, June 2, 1895.
86 Daily Examiner, May 26, 1895.
87 Daily Examiner, June 2, 1895.
Coubertin of France, who forsook a political career to devote his life to the introduction of sports on the international level. The International Olympic Committee was formed and de Coubertin proposed that the first games of the new era be celebrated in Athens, Greece. 88

These first Games did not cause much of a stir in the United States and most Americans paid little attention to them. The Boston Athletic Association was the only organization that took an interest and decided to send a team to Athens. This team consisted of eight men, one of whom was William Hoyt, the Harvard vaulter. 89 Another man to make the trip to Greece was A. C. Tyler, a pole vaulter from Princeton University who paid his own way to the Games. These two men were America's sole representatives in the pole vaulting event in the first modern Olympic Games. However, they did well for the Red, White and Blue, as Hoyt was Olympic champion with a leap of 10 feet 9 3/4 inches, and Tyler was runner-up at 10 feet 8 inches. 90 The other three vaulters in the event were from Greece. Theodoropoulos was third at 9 feet 4 1/2 inches, G. Damascos was fourth at 9 feet 2 1/2 inches, and B. Xydas was


fifth, also at 9 feet 2\(\frac{1}{2}\) inches. \(^{91}\)

Besides being Olympic champion, Hoyt also had the best recorded height of the year 1896. He cleared 11 feet 4\(\frac{1}{2}\) inches, \(^{92}\) while F. W. Allis of Yale was second best of the year at 11 feet 1 3/4 inches. \(^{93}\) Number three vaulter of 1896 was Charles S. Dole of Stanford University, who set a new Pacific Athletic Association record and new Coast record with a leap of 10 feet 10 1/2 inches. \(^{94}\) Also breaking both old records in that meet was Ralph B. Lloyd of the University of California, who cleared 10 feet 9 inches. \(^{95}\) A picture of Dole in the San Francisco Daily Examiner of May 3, 1896, shows that his hands were at least three feet apart at the time of bar clearance. This was the standard practice of the day. \(^{96}\)

The sixth best vaulter of that Olympic year was C. Van Wickle of Yale who went 10 feet 7\(\frac{1}{2}\) inches in the first annual Yale versus Princeton meet. \(^{97}\)

Three men also cleared 11 feet in 1897. B. Johnson of Yale was intercollegiate champion at 11 feet 3 5/8 inches. \(^{98}\)

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\(^{91}\) Ibid.


\(^{93}\) I.C.A.A.A.A., loc. cit.

\(^{94}\) Daily Examiner, May 3, 1896

\(^{95}\) Ibid.

\(^{96}\) Ibid.

\(^{97}\) Daily Examiner, May 17, 1896.

and Hoyt, the Olympic champion, was second in the intercollegiate meet at 11 feet 1 1/2 inches. 99 J. L. Hurlburt, Jr., a Wesleyan University student competing for the New York A. C., was American champion with a new A. A. U. record of 11 feet 1 inch. 100

During the Stanford Field Day of 1897, Charlie Dole set a new Coast and Stanford record with a leap of 10 feet 11 inches. Dole held the old record of 10 feet 10 1/2 inches set the year before. 101 Other top vaulters of the year were: Raymond G. Clapp of Yale, and Tyler of Princeton, each with marks of 10 feet 9 inches. 102 F. Mumma of the University of California cleared 10 feet 8 inches. 103

A new technique in pole vaulting was born in 1898 and along with it a new world record. Raymond G. Clapp of Yale University sailed 11 feet 10 1/2 inches, the highest vault in history to that date and a new world standard. 104 The new technique, introduced by Clapp, was the hand-shift or slide. Mr. A. C. Gilbert, in his letter, tells about it:

Hugh H. Baxter was the last world's champion to vault with his hands wide apart; i.e., the pole vault with his

99Ibid. 100A. A. U., loc. cit.
101Daily Examiner, April 4, 1897.
102Bushnell, loc. cit.
103Daily Examiner, April 25, 1897.
104Richardson, loc. cit.
time was more or less of a jumping event. I think he was the highest vaulter with his hands wide apart. Then followed R. G. Clapp of Yale. . . . He was the first one to my knowledge to use a slide; i.e., he would slide his left hand up the pole. . . . This certainly was a very important technical achievement. 105

Baxter himself says of the hand-shift "... but it is certain that R. G. Clapp of Yale used it when he made a record of 11 feet 10\(\frac{3}{4}\) inches in 1898, and all subsequent records were made in practically the same style." 106

The last major innovation in the pole vault was made by Clapp and the event took on a more modern look; very few technical changes in style have taken place since the days of Clapp.

Hoyt was again prominent in 1898, tying Clapp for the intercollegiate title with 11 feet 4\(\frac{1}{4}\) inches. 107 Two other Yale vaulters did well that year; Johnson at 11 feet 1 inch and Dudley at 10 feet 9 3/4 inches. 108 Robert E. Wilson of Northwestern University was the best vaulter in the newly formed Western Conference with a leap of 10 feet 6 inches, 109 while Jack Hoffman of the University of California was the best pole vaulter on the Coast at 10 feet 6 inches. 110

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105 Letter from A. C. Gilbert, July 8, 1958.
106 Schulte, op. cit., p. 146.
108 Bushnell, op. cit., p. 96.
109 Daily Examiner, April 24, 1898.
110 Ibid.
The year 1899 saw the United States getting back to a peaceful "gay-nineties" existence after a year of war with Spain. Track and field athletics seemed to suffer little from the war, as R. G. Clapp again led the parade of pole leapers with a top mark of 11 feet 5 inches, and a new I.C. A.A.A.A. record. Right behind Clapp were two vaulters from Cornell, Robert Deming and E. A. Kenzie, both with a height of 11 feet 3 inches. Irving K. Baxter, a student at the University of Pennsylvania wearing the colors of the New York A. C. was A. A. U. winner with a leap of 10 feet 9 inches. Another Pennsylvania student, M. B. Colket, cleared 10 feet 6 inches in winning the annual Penn Relays.

On the Coast that year, Hoffman was the number one pole vaulter with a mark of 10 feet 9 inches which, as the Daily Examiner of April 2, 1899 says, "Was only three inches from the intercollegiate record." Two other leading vaulters on the Coast that year, both from Stanford, were: E. M. Murphy and Charlie Dole, each at 10 feet 3 inches.

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111World Almanac, op. cit., p. 188.
112I.C.A.A.A.A., loc. cit.
114A. A. U., loc. cit.
115Bushnell, op. cit., p. 98.
116Daily Examiner, April 4, 1899.
117Daily Examiner, April 23, 1899.
The second modern Olympic Games were held in 1900 in Paris, France and the program listed the track and field championships merely as an international meet being held in conjunction with the World's Fair. Grombach, in his book about the Olympic Games, tells how the American team was formed:

The United States entered fifty-five athletes as their official track and field team, although actually this team consisted of many groups from various colleges—Yale, Princeton, Pennsylvania, Syracuse, Georgetown, Michigan, and Chicago—and some club representatives. Each college financed its own group. The New York Athletic Club also financed a team. The unattached entrants reached into their own pockets for expenses.

America again had only two vaulters entered in the Games. Both of them, Irving K. Baxter and M. B. Colket, were from the University of Pennsylvania, and both did well by the United States in Paris. Baxter was Olympic champion at 10 feet 9 3/4 inches, the same height cleared by Hoyt in the 1896 Games, while Colket won second place at 10 feet 8 inches. The marks of all the rest of the place winners were at least a foot higher than those achieved at Athens four years earlier. Also, more countries were represented in the pole vault at the Paris Games than were present in the 1896 contest. C. A.

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118 Grombach, op. cit., p. 115.
119 Ibid.
120 Potts, loc. cit.
121 Ibid.
Andersen of Norway was third at 10 feet 6 inches;\textsuperscript{122} Erik Lemming of Sweden was fourth at 10 feet 2 inches;\textsuperscript{123} K. G. Staaf of Sweden was fifth, also at 10 feet 2 inches;\textsuperscript{124} F. J. Kauser of Hungary won sixth place by also clearing 10 feet 2 inches.\textsuperscript{125}

As is sometimes the case, the Olympic champion does not always end up with the highest vault of the year. This was the situation in 1900. The top vaulter of the year was intercollegiate champion B. Johnson of Yale, with a top mark of 11 feet 3½ inches.\textsuperscript{126} Also clearing over 11 feet that year were two men from Princeton and one from California. D. S. Horton of Princeton, in a dual meet with California held at Princeton, New Jersey, cleared 11 feet 1½ inches,\textsuperscript{127} while Coleman, also of Princeton, won second place in the intercollegiates at 11 feet.\textsuperscript{128} Jack Hoffman of California set a new Coast record by clearing 11 feet.\textsuperscript{129}

About this time the spike on the end of the pole was beginning to disappear and a hole dug in the earth for planting the pole at take-off was being used in its place. On

\textsuperscript{122}\textit{Ibid.}\textsuperscript{.} \textsuperscript{123}\textit{Ibid.}\textsuperscript{.} \textsuperscript{124}\textit{Ibid.}\textsuperscript{.} \textsuperscript{125}\textit{Ibid.}\textsuperscript{.} \textsuperscript{126}\textit{I.C.A.A.A.A.}, loc. cit. \textsuperscript{127}\textit{Daily Examiner}, May 13, 1900. \textsuperscript{128}\textit{Bushnell, op. cit.}, p. 116. \textsuperscript{129}\textit{Daily Examiner}, April 1, 1900.
this matter, A. C. Gilbert says:

I haven't got the exact date, but I think there is considerable question in my mind who used the hole first. I know we started using it at Pacific University in 1900. We found out later they were using a hole in California and they may have used it in the East. I haven't done any research on that so I can't give you the exact information, but that is approximately the date.¹³⁰

Even as late as 1958, the National A. A. U. rule book, under Rule XLVIII, has the following as a part of their pole vault rule: "Any competitor shall be allowed to dig a hole not more than one foot in diameter, at the take-off, in which to plant his pole."¹³¹

One can envision a modern day pole vaulter going to a meet equipped with a pick and shovel, getting ready to dig a pole planting hole, while all of the officials wax with indignation.

Charles E. Dvorak of the University of Michigan was without a doubt the best vaulter of the year 1901. He won three important titles that year. As a member of the Detroit A. C. he won the A. A. U. meet, held at Buffalo, New York, with a leap of 11 feet 3 inches, tying the record set by Johnson the previous year.¹³² Dvorak also won the pole vault in the the first official Western Conference track and field meet,

¹³⁰Letter from A. C. Gilbert.
¹³¹A. A. U., op. cit., p. 208.
¹³²A. A. U., op. cit., p. 113.
with a leap of 11 feet $\frac{3}{4}$ inches, and tied with five others for the top spot in the intercollegiate championships at 10 feet 9 inches. Those tying with Dvorak at 10 feet 9 inches were E. Deakin of Pennsylvania, A. W. Coleman of Princeton, P. A. Moore of Princeton, W. Fishleigh of Michigan, and J. H. Ford of Yale. That same year W. H. Fredericks of Cornell cleared 10 feet $8\frac{3}{8}$ inches while competing indoors at the Old Armory at Ithaca, New York, and according to Bob Kane, "Just missed 11 feet, the world's indoor record."  

Six men vaulted 11 feet or higher during 1902, with Albert Gray of Pennsylvania sailing 11 feet 8 inches at the annual Penn Relays for a new meet record and the highest vault of the year. D. S. Horton of Princeton set a new I.C.A.A.A.A. record in winning that title with 11 feet 7 inches, and H. T. Chapman of Drake University established a new Western Conference meet record with a jump of 11 feet $6\frac{1}{4}$ inches. It is interesting to note that although Drake

133 Pick Squire, Western Conference Track and Field Records Book (Bedford, Ohio: The Lincoln Press, 1949), p. 32.
134 I.C.A.A.A.A., loc. cit.
135 Ibid.
136 Bob Kane, op. cit., p. 15.
137 Bushnell, op. cit., p. 104.
139 Squire, loc. cit.
was not a member of the Western Conference, the Drake team was permitted to enter the conference meet. In those early times outside teams were invited to enter the conference meet in order to bolster the gate receipts. After many years of eligibility difficulties with the outside schools, the conference decided to make it a closed meet after the 1926 affair. 140

The other 11 foot vaulters of the 1902 season were: Preston of Yale, with a height of 11 feet 3 inches made in the annual Yale-Harvard meet, 141 Coleman of Princeton, with a leap of 11 feet even made in the Princeton-California meet, 142 and Gardner of Syracuse, also with a mark of 11 feet, made in gaining second behind Horton in the I.C.A.A.A.A. championships. 143

Two men cleared 10 feet 9 inches that year. They were A. G. Anderson and J. E. Peters, both of the New York A. C. and both tying for the A. A. U. title. 144 At the California-Stanford Big Meet, held at Palo Alto, Wilcox of California cleared 10 feet 72\(\frac{1}{2}\) inches to win. 145


141 Daily Examiner, May 25, 1902. 142 Ibid.

143 Bushnell, op. cit., p. 117.

144 A. A. U., loc. cit.

145 Daily Examiner, April 20, 1902.
The year 1903 produced the second highest vault recorded to that date. Charles Dvorak, the champion from Michigan, sailed 11 feet 9 inches to win the Western Conference title and set a new conference record. At Milwaukee, Wisconsin, Dvorak also won the National A. A. U. meet at 11 feet. Second best vaulter of 1903 was H. L. Gardner of Syracuse, who tied Horton's one year old I.C.A.A.A.A. record of 11 feet 7 inches in winning that meet. W. McLanahan of Yale was the number three vaulter of the year going 11 feet 3 inches in gaining second place to Gardner in the intercollegiates.

On the Coast that year, two men cleared 11 feet 2 1/2 inches. Wilcox of the San Francisco Olympic Club and Beach of Stanford tied at that height in winning the annual Pacific Association meet. After the meet was over, Wilcox cleared a bar resting 11 feet 7 3/4 inches above the ground. However, the mark did not count.

The other three 11 footers of 1903 were: Carroll of Cornell, at 11 feet even made in winning the vault in a dual

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146 Squire, loc. cit.
147 A. A. U., loc. cit.
149 Bushnell, loc. cit.
150 Daily Examiner, May 3, 1903.
meet with Pennsylvania,\textsuperscript{151} Horton of Princeton, the co-
holder of the I.C.A.A.A.A. record, and Adriance of Yale,
both at 11 feet.\textsuperscript{152} The latter two made that height in
tying for third place in the intercollegiate championships.

This closes the early history of the pole vault in
America and brings us up to a new era in vaulting history--
the 12 foot pole vault.

\textsuperscript{151}Bob Kane, \textit{op. cit.}, p. 16.

\textsuperscript{152}Bushnell, \textit{loc. cit.}
CHAPTER IV

I. THE TWELVE FOOT POLE VAULT

1904 TO 1911

The Olympic year of 1904 opened with a monumental phase in the history of the pole vault. Norman Dole of Leland Stanford University became the first man in history to pole vault 12 feet. He accomplished this feat at the annual P. A. A. meet at Berkeley on April 23, 1904. The San Francisco Examiner of April 24, 1904 reports Dole's performance:

Three records were shattered today at the field day of the Pacific Athletic Association. One of them, Dole's in the pole vault, is a world's record and marks the greatest height ever vaulted by an athlete. The Stanford man was expected to do it. He had done so in practice, and all eyes were on him as he grasped his pole and sped down the runway to the take-off. Twice he failed, striking the bar as he attempted to clear it. On his third trial he soared in the air, swung over clear and true and landed amid the shouts and applause and congratulation of the spectators. The bar was 12 feet 1 and 32/100 inches.¹

Norman Dole of Stanford was the first athlete from the Pacific Coast to set a world record in the pole vault. There would be many more in the years to come.

The III Olympiad of the modern era was held at St. Louis as part of the St. Louis World's Fair of 1904. There were big crowds at the St. Louis Games, many of the fans

¹Examiner, April 24, 1904.
coming in Henry Ford's amazing new "gasmobile" and singing the hit song of the day, "Meet me in St. Louie, Louie."\(^2\) The track and field events were so badly mixed up with the St. Louis Fair and all of its side-shows that it is doubtful if it could be called an improvement over the poorly run Paris Games four years earlier.\(^3\) In any event, the Americans prevailed again in the vault and won all six places. Charles Dvorak was Olympic champion with a new Olympic record of 11 feet 6 inches, Leroy Samse was runner-up at 11 feet 3 inches, L. Wilkens was third, also at 11 feet 3 inches, W. McLanahan cleared 11 feet for fourth place, and W. R. Dray and Claude Allen were fifth and sixth respectively.\(^4\)

Besides Dole's record there were other top marks in 1904. McLanahan of Yale, the fourth place winner in the Olympic Games, leaped 11 feet 8 3/4 inches.\(^5\) A young man from Pacific University in Forest Grove, Oregon, by the name of Alfred C. Gilbert set a new Northwest record at 11 feet 7 3/4 inches.\(^6\) Gring of Harvard and Gardner of Syracuse

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\(^3\)Grombach, *op. cit.*, p. 116.
\(^4\)Potts, *loc. cit.*
cleared 11 feet 7\(\frac{1}{2}\) inches,\(^7\) while Behr of Yale had a best of 11 feet.\(^8\)

Dole's world record lasted only one year, for in 1905 Jean F. Gouder of France cleared 12 feet 2 inches for a new world standard.\(^9\) Gouder was a small, light man and vaulted with a lower hand reversed wrongly and went over the bar flat on his back.\(^10\) Also in 1905, another non-American cleared 12 feet. Minoru Fujii of Tokyo University, a Japanese "pole-climber," cleared 12 feet even.\(^11\)

The number one American vaulter of that year was Walter Dray of Yale, who was intercollegiate champion at 11 feet 10\(\frac{1}{2}\) inches.\(^12\) The next best height of the year belonged to two Mid-western athletes, E. C. Glover of Purdue and R. V. Norris of the University of Illinois, who tied for the Western Conference championship at 11 feet 9 3/8 inches.\(^13\) Dole of Stanford again won the Pacific Association meet, this time with a leap of 11 feet 9 inches.\(^14\) Two men of Cornell had good marks during the 1905 season. J. B. Phillips won the Penn Relays at 11 feet 6 inches and Phillips and T. W. Jackson

\(^7\)Bushnell, op. cit., p. 118.
\(^8\)Ibid.
\(^9\)Richardson, loc. cit.
\(^10\)Webster, op. cit., p. 231.
\(^11\)Letter from Oda.
\(^12\)Bushnell, loc. cit.
\(^13\)Squire, loc. cit.
\(^14\)Examiner, May 7, 1905.
tied for fourth in the I.C.A.A.A.A. meet at 11 feet 4 3/4 inches.¹⁵ A. C. Gilbert, competing for the Multnomah Athletic Club of Portland, Oregon, won the Junior A. A. U. title at 11 feet 1 5/8 inches. Portland hosted the National A. A. U. Championships that year, the first time they were ever held on the West Coast.¹⁶

The year 1906 opened with a new world record in the pole vault. A. C. Gilbert, having moved East and enrolled at Yale University as a medical student, sailed 12 feet 3 inches at the Irish-American Athletic Club Games at Celtic Park, New York.¹⁷ This broke by one inch Goudar's record leap of 1905. Gilbert's vault was merely the start of a rampage of world record assaults on the pole vault that has never seen an equal in the annals of track and field. The world's record was to be broken seven more times in a period of five years by three different men. Gilbert's record lasted a short time indeed, as Leroy Samse of Indiana University, won the Western Conference meet with a mighty leap of 12 feet 4 7/8 inches.¹⁸

Winning the intercollegiates that year were A. G. Grant of Harvard, and Jackson of Cornell, each clearing 11 feet 10

¹⁸Richardson, op. cit., p. 41.
3/4 inches for a new I.C.A.A.A.A. record. At the annual Penn Relays that year, Phillips of Cornell and Swain of Pennsylvania tied for first at 11 feet 8 inches. Three other men leaped 11 feet 6 inches in 1906; H. L. Moore of Princeton and the New York. A. C., Claude Allen of the Irish-American A. C., and the Frenchman, Gouder. The latter was the winner of the pole vault at Athens during the tenth anniversary of the Olympic Games. These Games are referred to as the unofficial Olympic Games inasmuch as they were held only two years after the last Games instead of the usual four. The marks made at these games are not carried on the official list of results of Olympic Games.

In these Games, B. Söderstrom of Sweden was second at 11 feet 1 4/5 inches, and Glover of the United States was third at 11 feet. The latter, according to F. A. M. Webster, "was the only competitor who used the old fashioned heavy wood pole, all the continentals preferring the safer and more pliant Bamboo.”

Frank Hill, in an article in the Athletic Journal of

20Bushnell, op. cit., p. 108.
21A. A. U., op. cit., p. 113. 22Ibid.
24Grombach, loc. cit. 25Webster, op. cit., p. 231.
February, 1948, credits Gouder with the introduction of the bamboo pole in scoring his victory in these Games. The introduction of the bamboo pole will be discussed in greater detail at a later point in this chapter.

It may be of interest to note here that in this year 1906 Minoru Fujii of Tokyo University cleared 12 feet 9 3/4 inches. This mark would have surpassed Samse's world record by almost five inches, but as Mr. Oda pointed out in his letter, the Japanese were still climbing the pole and did so until about 1910. Although the mark of Fujii's was never accepted as a world record, according to Mr. Oda, the Almanac of that time, published by Spalding, was said to have recorded it.

At New Haven, on May 18, 1907, in the annual dual meet with Harvard, Walter R. Dray of Yale leaped to a new world record of 12 feet 5 1/2 inches. Two other vaulters scaled the 12 foot mark that year. Edward T. Cook and Claude A. Allen, both of the Irish-American A. C., cleared 12 feet 3 inches at the National A. A. U. meet, held in conjunction with the Jamestown Exposition on September 6 and 7. This mark was a

26Hill, loc. cit.
27Letter from Oda.
new National A. A. U. record.29

A new Canadian record was also set during 1907, when W. Happenny of the Montreal A. C. leaped 11 feet 5 1/8 inches in winning the National Championships of Canada.30

The Olympic year of 1908 was another great milestone in the history of the pole vault. At no other time in history had the world record in the pole vault taken such a beating as during the season of 1908. Three times the record crumbled under the onslaught of Gilbert and Dray, the two Yale team mates. Dray started the parade by eclipsing his one year old standard by an inch when he won the Penn Relays at 12 feet 6 1/2 inches.31 Gilbert erased Dray's mark during the Olympic try-outs at Philadelphia, with a leap of 12 feet 7 3/4 inches.32 Later in the year, Dray regained the record as he raised it to 12 feet 9 1/2 inches.33

The IV Olympiad, or 1908 Games, were held in London and are said to have been the greatest in athletic history up to that time.34 They were not without incident, however, and one of those to provide much of the drama was the American vaulter, Gilbert. Gilbert became known as the "hatchet man of

29Ibid. 30Ibid. 31Bushnell, op. cit., p. 112. 32Amaya, loc. cit. 33Richardson, loc. cit. 34Grombach, op. cit., p. 117.
the London Games," when he used a hatchet to dig a pole planting hole at the vaulting pit. The London officials stuck with the old rule of using a spike on the end of the pole. However, the Americans for the past few years had become accustomed to the planting hole and insisted that it was legal. Gilbert and his vaulting mates won their point and were allowed to use a hole for planting the pole. Because the vaulters of the other nations were using the spiked pole, the Americans had to put their hole off center; this forced them to change their approach but evidently did not hamper their performance a great deal.35 Gilbert and E. T. Cooke came through with new Olympic record vaults of 12 feet 2 inches.36 E. B. Archibald of Canada was third at 11 feet 9 inches, C. S. Jacobs of the United States was fourth, also clearing 11 feet 9 inches, Bruno Söderstrom of Sweden won fifth place, also leaping 11 feet 9 inches, and Samuel Bellah of the United States and Benikas of Greece tied for sixth at 11 feet 6 inches.37

Other top vaulters of 1908 were C. S. Jacobs of Chicago University who vaulted 12 feet 4 inches in winning the Western Conference Meet,38 and Frank Nelson and Charles Campbell of

36Potts, loc. cit.
37Ibid.
38Squire, loc. cit.
Yale, each with a best of 12 feet.\textsuperscript{39} E. B. Archibald, the Canadian third place winner in the Games, also had a best height of 12 feet made in the English Championships.\textsuperscript{40}

One of the greatest improvements in equipment in the history of the pole vault took place about this time. That was the introduction of the bamboo pole into general use. There is no doubt that the use of the bamboo pole contributed much to the vast improvement of performance over the next forty years.

A number of men have been credited with the first use of the bamboo pole. We have already mentioned the Frenchman Gouders having used it in winning the 1906 unofficial Games at Athens.\textsuperscript{41} The early day champion, Hugh Baxter, speaks of the bamboo pole in his articles in Schulte’s book:

Undoubtedly the bamboo poles in general use contribute in some degree to the marvelous heights now obtained. It is a question, however, whether the oldtime pole vaulters, with their high grip and great speed at the take-off, would have been able to use the bamboo. The writer used a bamboo pole in 1878, but discarded it the following year for one made of white ash.\textsuperscript{42}

Richard V. Ganslen in his book says that the first bamboo poles for vaulting were sold by the Bamboo and Rattan

\textsuperscript{39}Colby, \textit{The New International Year Book}, 1909, pp. 55-56.

\textsuperscript{40}Webster, \textit{loc. cit.}

\textsuperscript{41}See page 45.

\textsuperscript{42}Schulte, \textit{op. cit.}, p. 146.
Gilbert has the following to say about the bamboo pole:

In 1905, in my sophomore year, there were stories that the Japanese used a bamboo pole. Walter Dray and myself secured some bamboo and we started trying them out. Walter Dray didn't like them and I stuck with it and I improved so fast that all Yale pole vaulters started using bamboo in the inter-collegiate games in 1908. Walter Dray, Frank Nelson, Charlie Campbell and myself, with bamboo poles, won all the points in the pole vault. Those games were held at Philadelphia in 1908 although we had been practicing with the bamboo pole two years before that. A protest was lodged against the use of them in those games but was not sustained and when I left with the American Olympic team I brought back from Paris a lot of bamboo and I started the Yale Bamboo Pole Vaulting Company, my first business venture and I sold a great many bamboo poles all over the United States.

From the foregoing information, it can be assumed that Baxter was the first American to use the bamboo pole, while Gilbert was the first American college vaulter to use it and also the first American to sell bamboo poles for vaulting. Gouder, then was the first European to use bamboo.

With all due respect to Ganslen and the other experts in the field, this investigator has found some evidence that the bamboo pole vaulting pole was in use at least forty-eight years before Gilbert introduced it generally and at least eighteen years before Baxter leaped with one in 1878. Mr. Oda, in his letter, has this to say:

43Ganslen, op. cit., pp. 4-5.

44Letter from A. C. Gilbert.
Now in regards to your main question, it seems that bamboo pole has been used in Japan for quite a while. We find a pole vaulting in an old painting (dated around 1860's) and bamboo pole is used there. A rope is used instead of wooden bar.45

Thus, it appears that the Japanese can be given some credit for the first use of the bamboo pole in pole vaulting. This is not unexpected, inasmuch as Japan is covered with many groves of tall green bamboo trees.

Regardless of who introduced the bamboo pole first, the fact remains that it was during the year 1908 that its use came into prominence and with it great strides forward in the progress of the pole vault.

Three men cleared 12 feet during the 1909 season. Charles Campbell of Yale was the leading jumper with a best of 12 feet 3 1/2 inches during the I.C.A.A.A.A. championships at Harvard Stadium, Cambridge, Massachusetts.46 Barr of Harvard and Nelson of Yale tied for second in that meet with leaps of 12 feet.47 In those same intercollegiate championships, Pickles of Pennsylvania and Cook of Cornell cleared 11 feet 6 inches.48 Leland Scott of Stanford University won the Western Conference meet with a vault of 11 feet 10 inches.49

45Letter from Mikio Oda.
47I.C.A.A.A.A., op. cit., p. 56.
48Ibid.
49Squire, loc. cit.
During the Westville Day Celebration in Westville, Connecticut, A. C. Gilbert, who had graduated from Yale the year before and who had gone into business manufacturing magic tricks, gave an exhibition pole vault and cleared an unheard of 13 feet 2 inches. Although this height was measured by A.A.U. officials, it could not be accepted as a new world standard inasmuch as it was not accomplished in competition. 50

The year 1910 was the year that Glenn H. Curtiss won $10,000 for the first continuous airplane flight. He flew from Albany to New York City, a distance of 137 miles in 152 minutes. 51 This was also the year that the world pole vault record returned to the Pacific Coast. A young man from Oakland, California by the name of Leland Stanford Scott, a student at Leland Stanford University, sailed 12 feet 10 3/16 inches at the Cal Field Day at Berkeley. 52 The record breaking height, cleared on his third trial, erased Dray's two year old world mark. Also that year, Scott cleared 12 feet 6 7/8 inches in winning the first annual Pacific Coast Conference meet at Berkeley. 53

The other leading vaulters of 1910 were F. D. Murphy of the University of Illinois, who won the Western Conference

52Examiner, May 1, 1910. 53Examiner, May 15, 1910.
meet with 12 feet 4 3/8 inches, \(^{54}\) Frank Nelson of Yale who won the intercollegiates at 12 feet 4 3/8 inches for a new I.C.A.A.A.A.A. mark, \(^{55}\) Harry S. Babcock, a Columbia University student competing for the New York A.C., who vaulted to victory at New Orleans in the national A. A. U. meet with a leap of 12 feet 1 inch, \(^{56}\) and E. H. Schroth of the New Orleans Y.M.C.A., who cleared 11 feet 5 3/4 inches in the Junior A. A. U. \(^{57}\)

The year 1911 found eight men clearing 12 feet, more than any other year before. Babcock was the leading vaulter of the year and intercollegiate champion with a new I.C.A.A.A.A.A. record of 12 feet 8 3/8 inches. \(^{58}\) Three athletes cleared 12 feet 6 inches in setting a new national A. A. U. mark. They were E. T. Cook of the Cleveland A. C., H. Coyle of the University of Chicago and Sam Bellah, a Stanford University student competing for the San Francisco Olympic Club. \(^{59}\)

The fifth best vaulter of 1911 was Samuel B. Wagoner of the Pittsburgh A. A., who set a new Junior A. A. U. standard in winning that meet at 12 feet 5 64/100 inches. \(^{60}\) H. H. D'Autremont, wearing the colors of Cornell University, had a

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\(^{54}\) Squire, loc. cit.


\(^{56}\) A. A. U., loc. cit. \(^{57}\) A. A. U., op. cit., p. 136.

\(^{58}\) I.C.A.A.A.A.A., loc. cit. \(^{59}\) A. A. U., op. cit., p. 113.

\(^{60}\) Ibid., p. 136.
best of 12 feet even,\textsuperscript{61} as did two leapers from the University of Illinois, Murphy and Graham.\textsuperscript{62}

So ends the 12 foot era in the history of the pole vault, from 1904 to 1911. During this short span of seven years, the world record was smashed eight times by six different men. At no time in history, before or since, has the world record in the pole vault been pushed upward so rapidly. Perhaps one of the reasons for this rapid rise was the introduction into general use of the bamboo vaulting pole. As was pointed out earlier, the bamboo pole was a decided aid to the vaulters of the world.

We now enter a new age in pole vaulting, the age of the 13 foot pole vaulter.

\textsuperscript{61}I.C.A.A.A.A., \textit{loc. cit.}

\textsuperscript{62}Squire, \textit{loc. cit.}
CHAPTER V
I. THE THIRTEEN FOOT POLE VAULT
1912 TO 1926

Two new names made their appearance on the pole vault scene during the year 1912, and with them began a new age in the history of the pole vault; the era of the 13 foot vault. One of the two men was Robert Gardner of Yale University, who on June 1, 1912 startled the world at the intercollegiates by sailing over the cross bar placed at 13 feet 1 inch. This vault wiped out Leland Scott's world standard of 12 feet 10 3/16 inches set two years earlier. Exactly one week after Gardner's feat, the second of the two men, Marc Wright of Dartmouth College, cleared 13 feet 2 3/4 inches at the Eastern Olympic tryouts at Cambridge, Massachusetts. Wright's mark was to stand as the world record for the next seven years.

The big international competition of 1912 was the V Olympiad held at Stockholm, Sweden. And the big star of the Games was the American Indian, Jim Thorpe. His performance in winning the pentathlon and decathlon so startled the world that

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2See page 52.
3Examiner, June 9, 1912.
4Grombach, op. cit., p. 118.
it prompted King Gustav V of Sweden to say to Thorpe, "Sir, you are the greatest athlete in the world." To which Thorpe replied simply, "Thanks, King." Thorpe's marks were never recorded in the record book, however, inasmuch as he was declared a professional upon his return to the United States. 5

The first three places in the pole vault at Stockholm were won by Americans. Harry S. Babcock set a new Olympic record with a leap of 12 feet 11 1/2 inches. 6 All six place winners broke the old record of 12 feet 2 inches. Second place went to Frank Nelson at 12 feet 7 5/8 inches, and third to Marc Wright, the new world record holder, also at 12 feet 7 5/8 inches. 7 W. Happenny of Canada was fourth at 12 feet 5 5/8 inches, D. Murphy of the United States was fifth at 12 feet 5 5/8 inches, and Bertil Uggla of the host country, Sweden, was sixth, also at 12 feet 5 5/8 inches. 8

The best vaulter on the Pacific Coast during the Olympic year of 1912 was Samual H. Bellah, the former Stanford captain, who competed for the Multnomah A. C. of Portland, Oregon. Bellah won the Pacific Coast Olympic tryouts at 12 feet 9 5/8 inches. 9 This mark was the fourth best in the world that year.

Another name was added to the list of 13 foot pole vaulters during the season of 1913. Samual B. Wagoner of the

5Ibid. 6Potts, loc. cit. 7Ibid. 8Ibid. 9Examiner, May 19, 1912.
Missouri A. C. won the National A. A. U. Championships with a new A. A. U. record of 13 feet even.\textsuperscript{10} T. Fiske, of Princeton, was the best college vaulter of 1913, winning the I.C.A. A.A.A. with a vault of 12 feet 8 inches.\textsuperscript{11} John K. Gold of the University of Wisconsin set a new Western Conference mark at 12 feet 7\(\frac{1}{4}\) inches.\textsuperscript{12}

The fourth best mark of 1913 belonged to a young man from Southern California. Charles Borgstrom, a student at the University of Southern California Preparatory School, won the Pacific Coast Interscholastic meet with a leap of 12 feet 6\(\frac{1}{16}\) inches.\textsuperscript{13}

Other top marks of 1913 were made by Howard Fritz of Cornell, 12 feet 4\(\frac{3}{4}\) inches,\textsuperscript{14} and G. W. Shaw of the Chicago A. A., 12 feet even.\textsuperscript{15}

The year 1914 will be remembered as the year that the world was wracked with war. Although the European war had little effect on athletic standards in the United States, the performances were not up to the marks of the previous few years. There were no 13 foot vaults made during 1914. The best height was made by Borgstrom of the University of Southern California. Borgstrom was ineligible to compete in the Pacific

\textsuperscript{10}A. A. U., loc. cit.  
\textsuperscript{11}I.C.A.A.A.A., loc. cit.  
\textsuperscript{12}Squire, loc. cit.  
\textsuperscript{13}Examiner, April 8, 1913.  
\textsuperscript{14}Bob Kane, \textit{op. cit.}, p. 23.  
\textsuperscript{15}A. A. U., \textit{op. cit.}, p. 136.
Coast Conference meet, or P. C. C. meet as it has come to be known; however, after the meet was over he cleared 12 feet 7 inches. He was also named the All-American Vaulter of the year by the A. A. U. Marc Wright, the world record holder competing for the Boston A. A., had a best that year of 12 feet 6 inches. Two vaulters from Cornell each cleared 12 feet 4 1/2 inches. They were Howie Fritz, and A. L. Milton. W. R. Curtis of the New York A. C. was the national champion of 1914 with a jump of 12 feet 3 inches. Two other men claimed the same height that year, C. E. Buck of Dartmouth and J. B. Camp of Harvard.

The big news of 1915 was still the war in Europe and the sinking of the liner Lusitania, with a loss of 1,198 lives, of which 124 were American. The war still seemed to have little effect on Americans in general and athletics went on, more or less, as usual.

A new name came upon the scene in the story of the pole vault, a name that was to have great significance in the years to come. Frank K. Foss of Cornell was the man and he had a

16Examiner, May 3, 1914. 17Schulte, op. cit., p. 27.
21Bob Kane, op. cit., p. 24.
22World Almanac, op. cit., p. 190.
best height of 12 feet 10 inches in winning the Penn Relays at Franklin Field, Philadelphia.\textsuperscript{23} Samuel Bellah of the Multnomah A. C. was the national champion with a jump of 12 feet 9 inches at the A. A. U. meet held in conjunction with the Pan Pacific Exposition in San Francisco.\textsuperscript{24} Florien Floyd of the University of Missouri was Western Conference title holder at 12 feet 6$\frac{1}{2}$ inches.\textsuperscript{25} Camp of Harvard had a best of 12 feet 3 $\frac{5}{8}$ inches,\textsuperscript{26} while Buck of Dartmouth\textsuperscript{27} and Milton of Cornell\textsuperscript{28} each cleared 12 feet 3 inches.

War news from Europe again crowded the front pages, and while D. W. Griffith's "Birth of a Nation" was opening in theatres across the country,\textsuperscript{28} a high school lad from Oregon Hill, Illinois was the number one vaulter of 1916. Sherman Landers, vaulting for the Chicago A. A., won the national title at the A. A. U. championships with a vault of 12 feet 9 inches. Landers also won the National Interscholastic meet at 12 feet 8 inches.\textsuperscript{30} The best college vaulter of 1916 was again Frank Foss of Cornell. Foss won the I.C.A.A.A.A.

meet with a leap of 12 feet 8 inches and according to the San Francisco Examiner of May 28, 1916, "Almost cleared 13 feet 2 7/8 inches for a new world record." Foss was merely giving an indication of things to come.


The VI Olympiad, to be held in Berlin during 1916, was cancelled because of the war.

War came to the United States during 1917 and no branch of sport responded more readily to the call to the colors than did track and field athletes. The result was that 1917 was a barren year in the way of outstanding performances. Track in Europe was confined almost entirely to the neutral Scandinavian countries. During the Swedish championships, held at Stockholm in August, 1917, C. Harleman of the city of Falun captured the pole vault at 12 feet 9 1/2 inches. This was the best height in the world during this war torn year.

The second best height in the world during 1917 was turned in by an American, Ed Knourek of the Illinois A. C., who won the A. A. U. championship at 12 feet 9 inches. Knourek almost did not get to compete in this meet, for soon after the entry of the U. S into the war, the A. A. U., cancelled it's championship meets, this action was later rescinded and the National A. A. U. Senior Outdoor Championships were held at Washington University Stadium, St. Louis, Missouri.

Two vaulters cleared 12 feet 6 inches during that year, P. W. Graham of Chicago University, and Newstetter of Pennsylvania.

For the first time since its inception, there was no I. C. A. A. A. A. outdoor championships held. They had been cancelled because of the war. However, the third annual I. C. A. A. A. A. indoor meet was held in as much as the date was before the U. S. entry into war. The pole vault in that meet was won at 12 feet ½ inch by Newstetter, E. L. Sewell also of Pennsylvania, and Foss.

The year 1918 came, and many of the top vaulters of this

37A. A. U., loc. cit.
39Squire, loc. cit.  
40Times, April 29, 1917.
41Colby, loc. cit.
time heeded President Wilson's plea to "Make the world safe for democracy." Competitors such as Frank Foss were serving their country in France. 42 This was not without effect on the marks in track and field competition. The best heights attained by the vaulters of 1918 were at the lowest ebb that they had been for fifteen years.

After a year's layoff, the I. C. A. A. A. A. resumed competition with their annual meet being held at Franklin Field, May 31 and June 1, 1918. Intercollegiate champions in that meet were Roy Easterday of Pittsburgh University and J. Z. Jordan of Dartmouth College, at 12 feet 3 inches. 43 Also with a best height of 12 feet 3 inches that year was C. Buck, competing for the Chicago A. A., who was National A. A. U. champion at that height. 44 Other top vaulters of 1918 were Cross of Michigan University, who was Western Conference victor with a leap of 12 feet, 45 and T. E. Sweeney of Yale, also with a best of 12 feet. 46

With the end of the great war on November 11, 1918, the track season of 1919 was again held under peaceful conditions. Frank Foss returned from overseas and became the fourth man in

42 Bob Kane, loc. cit.
43 I. C. A. A. A. A., loc. cit.
44 A. A. U., loc. cit.
45 Squire, loc. cit.
46 The Stars and Stripes, France, May 31, 1918.
history to clear 13 feet as he established a new world record in the pole vault with a leap of 13 feet 3 9/16 inches at Chicago, on August 23, 1919. This mark broke Wright's seven year old record of 13 feet 2 inches. The rest of the vault performances of 1919 were just average.

The triumph of the United States in the Inter-Allied Games in Pershing Stadium, Paris, in June and July was one of the high-lights of the track year. F. W. Floyd, former Missouri University athlete, won the pole vault in those games at 12 feet 4 inches. Two weeks earlier, in France, Floyd had won an army meet with a leap of 12 feet 6 inches. Other top vaults of 1919 went to Edwin E. Meyers of Dartmouth College, who won the I.C.A.A.A.A. meet at 12 feet 6 inches, and Green of Stanford University, who also had a best that year of 12 feet 6 inches. Ralph Spearow of the Multnomah A. C. was winner in the National A. A. U. Championships held at Great Lakes, Illinois, with a leap of 12 feet 3 inches, while Newstetter of the University of Pennsylvania also had a best

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47 Richardson, loc. cit. 48 See page 44.
50 Stars and Stripes, June 6, 1919.
51 Stars and Stripes, May 23, 1919.
52 I.C.A.A.A.A., loc. cit.
53 Examiner, May 4, 1919. 54 A. A. U., loc. cit.
height of 12 feet 3 inches.\textsuperscript{55}

The big athletic news that greeted the world in 1920 was the announcement that the Olympic Games were to be revived, but very little time was left for preparation. The choice of Antwerp as the site for the VII Olympiad was almost unbelievable. The Belgians had suffered so much from the war that the rest of the world wondered how they could gather their resources and get organized at all.\textsuperscript{56}

The Games were run smoothly despite the poor conditions and continuous rain. And Frank Foss, vaulting in the rain with a muddy take-off, won the Olympic championship with a new world and Olympic record of 13 feet 5 inches.\textsuperscript{57} Foss's form was the last word in the style of the day, the jack-knife. He had mastered the form to a high degree, and for what was known of vaulting styles in those days, his was a very efficient style indeed. Foss was a great champion and the last world record holder to use the true jack-knife style.

The other places in the Games of 1920 were won by: Henry Pedersen of Denmark, second at 12 feet 3\frac{3}{4} inches, Edwin Meyers of the United States, third at 12 feet 3\frac{3}{4} inches, Ed

\begin{footnotes}
\item \textsuperscript{55}Times, June 1, 1919.
\item \textsuperscript{56}Grombach, op. cit., p. 121.
\item \textsuperscript{57}Bob Kane, op. cit. p. 29.
\end{footnotes}
Knourek of the United States, fourth at 11 feet 7 3/4 inches, Ernfrid Rydberg of Sweden, fifth at 11 feet 7 3/4 inches, and Lauritz Jürgensen of Denmark, sixth at 11 feet 7 3/4 inches. 58

There were many good marks during the year 1920, as performances always seem to improve during an Olympic year. Three other men besides Foss had vaults of over 13 feet. Edwin E. Meyers, competing for the Chicago A. A., tied with Foss for the National A. A. U. title with a new A. A. U. record of 13 feet 1 inch. 59 Eldon Jenne of Washington State College set a new Pacific Coast Conference record at Palo Alto with a leap of 13 feet 5/8 inch, 60 and Ralph Spearow of the Multnomah A. C. cleared 13 feet 3/4 inch earlier in the year. 61 Knourek of the Illinois A. C. cleared 12 feet 10 inches, 62 and T. P. Gardner of Yale had a best of 12 feet 9 inches. 63

Two of the big news stories of 1921 were Albert Einstein winning the Nobel Prize in physics and Jack Dempsey knocking out George Carpentier. 64 However, the news stories on pole vaulting were not as sensational. There were no 13 foot vaults made during the track season of 1921. The top

58Potts, loc. cit. 59A. A. U., loc. cit.
mark of the year was turned in by Gardner of Yale, at 12 feet 9 3/4 inches. Ed Knourek of the Illinois A. C. was winner of the A. A. U. meet at Pasadena, California, with a leap of 12 feet 7 3/4 inches, while Richard N. Emmons of the University of Southern California and the Los Angeles Athletic Club, or L.A.A.C., won the Junior National A. A. U. title at 12 feet 7 3/4 inches. Dale Merrick of the University of Wisconsin had a mark of 12 feet 6 inches to his credit, and A. G. Norris of the University of California cleared 12 feet 5 inches.

At this time the National Collegiate Athletic Association conducted its first track and field meet in Chicago. The pole vault in this first N.C.A.A. meet was won by L. Welch of Georgia Tech, Jenne of Washington State, Wilder of Wisconsin, and Gardner of Yale, all tying at 12 feet.

The year 1922 produced three men over 13 feet and one of them, Charles Hoff of Norway, set a new world record. Hoff broke Foss' world record with a leap of 13 feet 6 1/8 inches. During the National A. A. U. championships at Newark, New

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65 *Times*, May 8, 1921. 66 *A. A. U., loc. cit.*
67 Ibid., p. 136. 68 *Times*, May 1, 1921.
71 Richardson, *loc. cit.*
Jersey, in September of 1922, two veteran pole vaulters, Edward Knourek of the Illinois A. C. and Ralph Spearow of the Multnomah A. C., sailed 13 feet to tie for first in the championships.72

Among the best vaulters of 1922 were Gardner of Yale, at 12 feet 9 inches,73 and Norris of the University of California, also with a best of 12 feet 9 inches. K. P. Libbey of Dartmouth College,74 W. Black of Stanford University,75 and E. V. Gouinlock of Cornell University,76 each cleared 12 feet 6 inches.

On March 11, 1922, Edwin Meyers set a new American indoor record for a board runway with a leap of 12 feet 8 ½ inches.77

Hoff was again the best vaulter in the world in 1923, and on July 22, 1923, in Denmark, he sailed 13 feet 9 3/4 inches to break his own world mark set the year before.78

A young man from the University of Illinois was the second best vaulter in the world that year. His name was

73Times, April 30, 1922. 74Times, May 28, 1922.
75Ibid. 76Times, April 30, 1922.
78Ibid., p. 47.
Dean Brownell, and on June 2, 1923, at Ann Arbor, Michigan, at the Western Conference, or Big Ten meet as it had come to be known, Brownell cleared 13 feet 2 inches for a new conference record. Later that same year on September 1, at Stagg Field, Chicago, Edwin Meyers won the A. A. U. title at 13 feet 1 inch, which tied the A. A. U. record that he and Foss had set in 1920.

There were many more good vaulters during that season of 1923. Nineteen year old Harry Smith of San Diego High School, San Diego, California, established a new world's interscholastic mark with a leap of 12 feet 11 7/8 inches. E. McKown of Kansas State Teachers College and Jim Brooker of the University of Michigan won the N.C.A.A. meet at 12 feet 11 inches, while Norris of the University of California and Owen of the University of Pennsylvania took the I.C.A.A.A.A. honors at 12 feet 9 inches. Ten other vaulters cleared 12 feet 6 inches or higher that year.

Seven men sailed over the 13 foot figure during the Olympic year of 1924. An eighteen year old youngster from Hollywood High School, Hollywood, California, had the best

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79 Squire, loc. cit.
80 Colby, The New International Year Book, 1924, p. 64.
81 Schulte, op. cit., p. 72. 82 N.C.A.A., loc. cit.
83 I.C.A.A.A.A., loc. cit.
height in the world that year, in the absence of Hoff who had broken an ankle. Lee Barnes was the boy's name, and he won the Southwestern Olympic Tryouts in Los Angeles with a jump of 13 feet 2 1/8 inches. Ed Meyers retained his A. A. U. crown clearing 13 feet, while McKown, the Kansas State Teachers College athlete, had a best of 13 feet 1 3/8 inch.

At the final Olympic Tryouts held in the East on June 14, 1924, Jim Brooker of the University of Michigan, Ralph Spearow of the University of Oregon, Glen Graham, an eighteen year old student at the California Institute of Technology, and Barnes all cleared 13 feet, the greatest tie in pole vaulting history, up to that time.

Other noteworthy marks of that year were turned in by B. M. Owens of the University of Pennsylvania, who won the I.C.A.A.A.A. meet 12 feet 10 3/4 inches, and R. H. Gartley of Hawaii, who was the winner of the Far-Western Olympic Games Trails at San Francisco, with a jump of 12 feet 10 inches.

Another young vaulter who might be made mention of in

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84 Examiner, May 25, 1924.
85 A. A. U., loc. cit.
86 Don Pierce, Kansas Relays and University of Kansas Track and Field Dope Book, 1958, (Published by the University of Kansas, 1958), p. 12.
87 Times, June 15, 1924.
89 Examiner, May 18, 1924.
passing was Sabin Carr of Hill School, Pottstown, Pennsylvania. Carr won the Eastern Olympic Tryouts in Yankee Stadium, New York City, by clearing 12 feet 9 inches. This lad was destined to add much to the history of the pole vault in later years.

The other 13 footer of 1924 was Brownell, who set a new American indoor dirt runway record, by clearing 13 feet 5/8 inch at Evanston, Illinois on March 15, 1924.

The VIII Olympiad in Paris in 1924 was high lighted by the all-out effort of the French government to make the 30th anniversary of the rebirth of the Olympic Games an important international athletic meeting and not the fiasco of 1900. The great hero of the track and field competition was Paavo Nurmi of Finland, while the eighteen year old American pole vaulters, Lee Barnes and Glen Graham, tied for the pole vault title. Both Barnes and Graham cleared 12 feet 11 ½ inches, but the former was declared the winner in a jump-off. The third place went to the American James Brooker at 12 feet 9 ½ inches, while Henry Pedersen of Denmark was fourth at 12 feet 9 ½ inches, and Victor Pickard of Canada was fifth at 12 feet 5 5/8 inches. Sixth place went to Ralph Spearow of the U. S.

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90 Times, June 8, 1924. 91 Spaldings, loc. cit.
92 Grombach, op. cit., p. 122.
93 Potts, loc. cit.
with a height of 12 feet 1 3/4 inches. After the Games were over, Spearow toured Japan, and at a meet in Tokyo was credited with a vault of 13 feet 10 ½ inches. This mark exceeded Hoff's world record, but due to some unknown reason it never went on the books as an official record. Whatever the mark cleared by Spearow that day, his form seemed to give inspiration to the Japanese vaulters.

Another significant event that took place in 1924 was the first official use of the standard wooden vaulting box. It was first introduced at the Paris Games. As was pointed out earlier, since 1900 a hole dug in the ground in front of the pole vault pit was all that was used for planting the pole. In order to establish some form of uniformity, the N.C.A.A. rule book as late as 1924 carried this note about planting holes:

This planting hole should be approximately nine inches deep, eighteen inches wide and should be sloped back to a distance of thirty-six inches.

Concerning the adoption of the wooden planting box, Gilbert says:

I think I was Chairman of the Track and Field Committee

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94 Ibid. 95 Webster, op. cit., p. 234.
96 See page 36.
97 Spalding's N.C.A.A. Track and Field Rules, 1924, pp. 29-30.
of the A. A. U., I know I represented them at the International Federation meeting when the box was adopted officially, although I know in California and I knew in Yale we used it long before it was officially adopted. They didn’t adopt the one we tried to get adopted, but it was approximately the same. . . . The dirt holes, none of them were alike, and there was always an argument how deep you should dig them—that’s why the box was adopted. 98

The Official Rule Book of the N.C.A.A. of 1926 carried this rule, and it is essentially the same today:

It is recommended that a wooden box be used for the planting pit. The box should measure 3 feet 6 inches in length and 2 feet wide at the front, tapering to 6 inches in width at the stop-board, which shall be 8 inches deep. The box shall be so placed that the front and the tops of the side and stop-board shall be flush with the ground and the stop-board at right angles with the ground and placed flush with the landing pit. 99

The year 1925 saw the return of the Norwegian world champion, Charles Hoff, to the pole vault wars. Hoff started his record shattering assaults by scaling 13 feet 10 2 inches to better his own world mark of 13 feet 9 3/4 inches. 100 And then on September 27, 1925, at Turku, Finland, he lifted himself to his all-time best of 13 feet 11 3/8 inches. 101

Meanwhile, in the United States, the top vaulters of that year proved to be McKown, with a new Kansas Relays record

98Letter from A. C. Gilbert.
100Richardson, loc. cit.
101Schulte, op. cit., p. 10.
of 13 feet 2 7/8 inches, 102 Nelson B. Sherrill of the University of Pennsylvania, with a leap of 13 feet 3/4 of an inch, 103 and a California youth from Fullerton High School by the name of Verne McDermott, who won the Southern Pacific A. A. U. title with a vault of 13 feet. 104 R. C. Boucher of Northwestern University also had a mark of 13 feet. 105 At San Francisco, Harry Smith of the L.A.A.C. won both the Senior and Junior A. A. U. titles with exactly the same height, 12 feet 11 1/8 inches, 106 and Wiesner of Milwaukee Normal had a best of 12 feet 11 inches. 107

It is of importance at this time to mention the great contribution that Charles Hoff made to the advancement of technique in the pole vault. Hoff was the first man to introduce the fly-away form of clearance style as we know it today. This style differs from the old jack-knife type of clearance, in that the feet do not drop down below the level of the crossbar until the pole is released. The introduction of this form has probably contributed more to the great progression of records in the pole vault than any other phase of vaulting,

102Times, May 10, 1925. 103Ibid.
104Examiner, May 17, 1925.
with the exception, perhaps, of the introduction of the hand-shift.

Charles Hoff was again the big news item in track and field of 1926. Hoff was invited to tour the United States and participate in a number of meets across the country. Three of his appearances were to be on the West Coast, at Seattle, San Francisco, and Los Angeles. The "Norwegian Eagle", as the newspapers of the day tagged him, competed at Seattle in the Washington Relay Carnival, and cleared 13 feet 8 inches.\(^{108}\) He was then supposed to vault in a meet in San Francisco the following week. However, he sent a telegram to the promoters of the San Francisco meet and told them he would be unable to appear. He was informed by the A. A. U. that if he failed to perform at San Francisco, he would not be permitted to compete in Los Angeles, his tour would be cancelled, and he would be sent home. Hoff's claims of being tired and in poor shape were not held by the A. A. U. as being valid, and his travel permit was revoked.\(^{109}\)

Also at about this time, allegations of irregularities in his expense account were brought forward, and Hoff was declared a professional.\(^{110}\) Lawrence Robinson of the New York

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World-Telegram, in an article in the program of the National
A. A. U. Track and Field Championships of 1943, had the
following to say about the "Norwegian Eagle":

The year after Nurmi's invasion, another visitor came
over, a pole vaulter named Charles Hoff from Norway, who
it developed was a magnificent vaulter ahead of his time
but slightly obscene on the expense-account side, an item
that culminated with his turning out a Quisling when the
Nazis besmirched his native land.\textsuperscript{111}

Thus ended the brilliant career of one of the greatest
champions the pole vault has ever known. The fine points of
technique contributed to the art of pole vaulting by this man
went a long way in helping to form the styles of the record
breakers to come. And what became of Hoff himself, after
that? He joined a vaudeville troupe and toured the nation
giving vaulting exhibitions on stage, between the vaudeville
acts.

Pole vault competition moved right along during 1926,
despite the unfortunate happenings of Hoff. Lee Barnes had
enrolled at the University of Southern California and set a
new intercollegiate record at the annual P. C. C. meet in Palo
Alto, with a jump of 13 feet 8 inches.\textsuperscript{112} Glen Graham of the
California Institute of Technology won the S.P.A.A.U. meet at

\textsuperscript{111}Official Program, National Track and Field Champions-

\textsuperscript{112}Examiner, May 16, 1926.

\textsuperscript{113}Ibid.
13 feet 3 inches, and Sabin Carr the former Hill School star, competing for Yale University, also cleared 13 feet 3 inches. Hoff, that year, wrote a letter to a friend in England, and predicted Carr would be the first man to clear 14 feet.

Paul J. Harrington of Notre Dame, whose son was to become one of the world's top vaulters during the 1950's, had a best outdoor mark of 13 feet 7/8 of an inch, and in a dual meet with Illinois, on a dirt runway indoors, cleared 13 feet 1 1/8 inches. Two other men had bests of 13 feet that year of 1926. The veteran Chicago A. A. vaulter, Ed Meyers, who was National A. A. U. champion with Harrington, and newcomer Frank Wirsig of the University of Nebraska.

This brings to a close the 13 foot era of the pole vault, and takes us up to a brand new dimension in pole vaulting, the 14 foot pole vault.

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113 Ibid.
114 Times, May 16, 1926.
115 Webster, op. cit., p. 233.
117 A. A. U., op. cit., p. 113.
118 Schulte, op. cit., p. 7.
CHAPTER VI

I. THE FOURTEEN FOOT POLE VAULT
1927 TO 1940

The front page headlines in late May, 1927, were carrying stories about Captain Charles A. Lindbergh, a U. S. air mail pilot, who left Roosevelt Field, Long Island, alone in a monoplane, the "Spirit of St. Louis", headed non-stop for Paris. The sport pages of the day were carrying headlines, too. Perhaps they were not as far reaching to the general public, but they were just as dramatic. "Yale Man Does the Impossible in the Pole Vault" is the way the newspapers told the unsuspecting public that on the afternoon of May 28, 1927, Hoff's prediction had come true. At the I.C.A.A.A.A. championships at Franklin Field, Philadelphia, a tall, lean young man by the name of Sabin W. Carr of Yale squirmed over the cross-bar at the incredible height of 14 feet. It took 23 years for man to travel 2 feet since that April day in 1904 when Norman Dole first cleared 12 feet. Sabin Carr, then, was the

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1 World Almanac, op. cit., p. 192.
2 San Francisco Chronicle, May 29, 1927.
4 See page 41.
pioneer who paved the way for some 34 men to clear that magic height of 14 feet during the next 13 years.

The three second best marks of 1927 went to Western vaulters. Lee Barnes of U. S. C. was second to Carr in the intercollegiates with a jump of 13 feet 9½ inches. Ward Edmonds of Stanford University was third in the same meet at 13 feet 6 ½ inches, while Jack Williams of U. S. C. cleared 13 feet 6 inches in the P. C. C. meet.

Frank Wirsig of the University of Nebraska won the Missouri Valley Conference meet with a leap of 13 feet 4 27/64 inches, Harold McAtee of Michigan Normal had a best of 13 feet 3 5/8 inches, while Charles W. McGinnis of the University of Wisconsin and William H. Droegmuller of Northwestern each cleared 13 feet 3 inches in the Big Ten meet for a new Western Conference record.

As was pointed out earlier, an Olympic year seems to bring about superb performances, more so than any other year. The Olympic year of 1928 was no exception. Three men sailed

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6Ibid.
7Ibid.
8Ibid.
9Ibid., p. 85.
10Squire, loc. cit.
over 14 feet, and Carr's one year old record was smashed to the ground. At the second annual West Coast Relays in Fresno, California, little Lee Barnes of U. S. C. soared 14 feet 1\frac{1}{2} inches for a new world record.\textsuperscript{11} In that same meet, Ward Edmonds of Stanford became the third man in history to clear 14 feet when he was given credit for that height behind Barnes.\textsuperscript{12} Earlier in the year, Carr made 14 feet 1 inch for a new world indoor record.\textsuperscript{13}

At the Final Olympic Tryouts, on July 9, 1928, Droegmuller, Barnes, and Carr all tied for first at 13 feet 9 inches.\textsuperscript{14} Charles McGinnis, vaulting for the Chicago A. A., was fourth in that meet at 13 feet 6 inches and also qualified for the trip to the Games.\textsuperscript{15}

Other 13 foot 6 inch vaulters during the 1928 season were Williams of U. S. C.,\textsuperscript{16} Frank Wirsig, vaulting for the United States Marine Corps, who won the Eastern Olympic Tryouts,\textsuperscript{17} Frederick W. Sturdy of Yale,\textsuperscript{18} and Vic Pickard, vaulting for the British Empire team in London.\textsuperscript{19}

\begin{itemize}
\item \textsuperscript{11}West Coast Relays Official Program, 1945, p. 30.
\item \textsuperscript{12}Potts, op. cit., p. 81. \textsuperscript{13}Ibid.
\item \textsuperscript{14}Examiner, July 9, 1928. \textsuperscript{15}Ibid.
\item \textsuperscript{16}Spalding's Guide, 1929, p. 65.
\item \textsuperscript{17}Examiner, July 17, 1928. \textsuperscript{18}Examiner, June 3, 1928.
\item \textsuperscript{19}Webster, op. cit., p. 235.
\end{itemize}
The IX Olympiad was held at Amsterdam, and was marked by cold and rainy weather. It also marked the return to Olympic competition of Germany; who had been turned away from the Games of 1920 and 1924, and had not participated since 1912.  

America again took the first three places in the pole vaulting competition. Carr was Olympic champion with a new Games' record of 13 feet 9 3/8 inches. Droegmuller was second at 13 feet 5 3/8 inches, while McGinnis captured the third spot at 12 feet 11\(\frac{3}{8}\) inches. Vic Pickard of Canada, again placed in the Games, this time fourth, with a leap of 12 feet 11\(\frac{1}{2}\) inches. Lee Barnes, the 1924 Olympic Champion and new world record holder, could do no better than fifth, also at 12 feet 11\(\frac{1}{2}\) inches, the same height he cleared in winning in 1924. Sixth place went to Y. Nakazawa of Japan, at 12 feet 9\(\frac{1}{2}\) inches. Nakazawa was the first of many great vaulters to come from that island country.

The year 1929 saw the "Roaring Twenties" drawing to a fast close. People had been living high and fast, despite the Eighteenth Amendment; words like "bootlegger" and "speakeasy" had become implanted in the vocabulary. Everything was

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20 Grombach, loc. cit.
21 Potts, loc. cit.
22 Ibid.
wonderful, and then the "Coolidge Prosperity" collapsed in the stock market crash.23

The pole vault news of 1929 was dim also. There were no 14 foot vaults outdoors that year, although Fred Sturdy of Yale did clear that height indoors.24 Sturdy also had the best outdoor height of the year, winning the A. A. U. championships at Denver, Colorado, with a leap of 13 feet 9 1/2 inches.25 Sturdy, Ward Edmonds of Stanford, and Jack Williams of U. S. C., all tied for the I.C.A.A.A.A. title at 13 feet 9 inches,26 and Edmonds and Thomas Warne of Northwestern University won the N.C.A.A. meet with vaults of 13 feet 8 7/8 inches.27

Vic Pickard, the Canadian Olympic vaulting for the University of Pittsburgh, had a best of 13 feet 7 1/2 inches,28 while Warne and Verne McDermott of the University of Illinois set a new Big Ten record of 13 feet 7 inches.29 H. F. Canby of the State University of Iowa set a new world record for indoor vaulting on a dirt runway at 13 feet 7 1/2 inches,30 and

23World Almanac, loc. cit.
27N.C.A.A., loc. cit.
29Squire, loc. cit. 30Spalding, 1930, op. cit., p. 245
Warne broke that mark by \(\frac{3}{4}\) of an inch when he cleared 13 feet 7 3/4 inches, one week later.\(^{31}\)

Three non-Americans set records for their country during 1929. de Castro of Brazil cleared 13 feet 2 inches, Jope Lindroth of Finland leaped 13 feet 1 7/8 inches, and Wegner of Germany had a best mark of 13 feet 1 inch.\(^{32}\)

The year 1930 produced one 14 foot pole vault. Tommy Warne of Northwestern University cleared that height on May 3, 1930, to win the Ohio Relays at Columbus, Ohio.\(^{33}\) The second best mark of the year went to Verne McDermott of the University of Illinois, who set a new Big Ten record in again winning that title. This time he cleared 13 feet 10 5/8 inches.\(^{34}\)

Oscar Sutermeister of Harvard was I.C.A.A.A.A. champion at 13 feet 6 inches,\(^{35}\) while Warne and Fred Sturdy, of the L.A.A.C., won the National A. A. U. meet, also at 13 feet 6 inches.\(^{36}\)

The best foreign vaulter of 1930 was a Japanese by the name of Shuhei Nishida. In an international meet in Oslo, Norway, Nishida cleared 13 feet 6 inches, for a new Japanese

\(^{31}\)Ibid., p. 53. \(^{32}\)Ibid., pp. 246-7-8. 
\(^{33}\)Potts, loc. cit. \(^{34}\)Squire, loc. cit. 
\(^{35}\)I.C.A.A.A.A., loc. cit. \(^{36}\)A. A. U., loc. cit.
record. The event was won by Warne, with a leap of 13 feet 9 inches, proving him to be the best vaulter in the world for the year 1930. 37

Again only one man cleared 14 feet during the 1931 season, and in him another new and great name came upon the vaulting scene. He was husky William N. Graber of U. S. C., the son of an olive rancher from Ontario, California. Graber won the I.C.A.A.A.A. meet with a vault of 14 feet 1/2 inch, and in so doing, broke Carr's meet record of 14 feet even set in 1927. 38 The second best vaults of the year belonged to two Mid-West champions, Warne and McDermott, who shared the N.C. A.A. title with Graber at 13 feet 10 5/16 inches. 39 George Poole of the University of California had a best mark of 13 feet 9 3/4 inches, 40 and George Jefferson of the University of California at Los Angeles became the new record holder of that institution when he tied with Graber for the West Coast Relays title at 13 feet 9 inches. 41

Barney Berlinger, the great all-around athlete from the University of Pennsylvania, had a best height of 13 feet 8

40 Examiner, March 29, 1931.
41 West Coast Relays Program, loc. cit.
inches,\textsuperscript{42} while Bryce Beecher of the University of Indiana,\textsuperscript{43} Burt DeGroot of Stanford University,\textsuperscript{44} and Lee Barnes of the L.A.A.C., cleared 13 feet 6 inches during the year 1931. Don Zimmerman of Tulane University won the Junior A. A. U. championship at 13 feet 5 7/8 inches,\textsuperscript{45} while Jack Wool, a San Jose State College student vaulting for The San Francisco Olympic Club, won the Senior A. A. U. title by soaring 13 feet 4 1/2 inches.\textsuperscript{46}

1932, the year of the X Olympiad, again saw pole vaulting marks go skyrocketing upward. Three men had best performances over 14 feet, and ten others cleared 13 feet 10 inches or better.

At the Final Olympic Tryouts held at Stanford University, Palo Alto, California, the pole vaulters were putting on a dramatic show for the spectators. With the bar resting at 13 feet 10 inches, Jefferson, Zimmerman, Sturdy, Bernard Deacon of the L.A.A.C., William Miller of Stanford, and Graber, all cleared that height. The bar was then raised to 14 feet 1 5/8 inches, a height that surpassed Barnes' world record of 14 feet 1 3/8 inches. Miller and Graber sailed over, the other

\textsuperscript{42}\textit{Times}, May 31, 1931. \textsuperscript{43}\textit{Times}, May 24, 1931.
\textsuperscript{44}\textit{Examiner}, April 19, 1931. \textsuperscript{45}A. A. U., \textit{op. cit.}, p. 136.
\textsuperscript{46}A. A. U., \textit{op. cit.}, p. 113.
four failed and were eliminated. The bar was then placed at 14 feet 4 3/8 inches and Graber flew over for a new world standard and the highest mark ever attained by mortal man to that date. Jefferson won the vault-off for third, and joined Miller and Graber as the American representatives in the Olympic Games.47

The X Olympiad in Los Angeles brought track and field to one of the finest and largest stadiums in the world. Los Angeles outdid itself by providing facilities that would be hard to improve upon. Over 100,000 people witnessed the opening of the Games on July 30, 1932.48 Three days later the pole vault event was held, and William Miller won a tough battle with the Japanese champion Shuhei Nishida. Miller cleared 14 feet 1 7/8 inches, for a new Olympic and world record. Miller's mark was recognized before Graber's in as much as it was established in Olympic competition. Nishida was second at 14 feet 1 3/4 inches which also broke the old Olympic record. Third place went to Jefferson at 13 feet 9 inches, while the favorite, Bill Graber, was fourth at 13 feet 7 1/2 inches. Another athlete from the land of the rising sun, Shizuo Mokizuki, won fifth place with a vault of 13 feet 1½.

47Examiner, July 17, 1932.
inches, and the Brazilian, Lucio de Castro, was sixth with a jump of 12 feet 9½ inches.49

Other best performances of the Olympic year 1932 belonged to Jefferson, 13 feet 11 5/8 inches,50 Zimmerman, 13 feet 10 1/2 inches,51 Wirt L. Thompson Jr. of Yale, 13 feet 10 inches,52 Bryce Beecher of Indiana, 13 feet 10 inches,53 Irving Seeley of Illinois, 13 feet 10 inches,54 George Poole of the University of California, 13 feet 10 inches,55 Lee Barnes of the L.A.A.C., won the Southern California Tryouts at 13 feet 10 inches,56 and a freshman from Yale, by the name of Kieth Brown, who also sailed over 13 feet 10 inches.57

Four men vaulted 14 feet or higher during 1933. On May 6, 1933, in a dual meet with Stanford at Los Angeles, Bill Graber leaped 14 feet 2 3/8 inches.58 This jump broke the official world record of 14 feet 1 7/8 inches set by Miller in the Olympic Games the previous year, but was not better than Graber's 14 feet 4 3/8 inches that was up for approval.

The other 14 footer that year were Kieth Brown of Yale

49Potts, loc. cit.
50Ibid., p. 68. 51Ibid. 52T.C.A.A.A.A., loc. cit.
53N.C.A.A., loc. cit. 54Ibid.
55Examiner, May 22, 1932. 56Examiner, July 9, 1932.
57Ibid. 58Examiner, May 7, 1933.
with a best mark of 14 feet 1½ inches, Matthew Gordy of Louisiana State University who became the first athlete from the South to scale 14 feet when he cleared that height on June 17, 1933, at Chicago, to tie with Brown for the N.C.A.A. title, while Bill Miller of Stanford also had a best of 14 feet in 1933.

With vaults of 13 feet 9 inches or better that year were Bud Deacon of Stanford, with 13 feet 9 inches, Wirt Thompson of Yale, and George Jefferson of U.C.L.A., each with a best height of 13 feet 9 inches. Shuhei Nishida and Sueo Oye of Japan both cleared 13 feet 9 3/8 inches for the best non-American marks of the year. Estil Lenington and Irving Seeley, both from the University of Illinois, cleared 13 feet 8 inches, as did the ex-Pennsylvania star, Berlinger, to round out the top vaulters of 1933.

1934 was the year that John Dillinger, Public Enemy Number One, was shot to death by G-Men outside a movie house.

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59 Times, May 21, 1933. 60 Potts, op. cit., p. 81.
61 Examiner, March 5, 1933. 62 Examiner, April 16, 1933.
63 Times, May 21, 1933. 64 Examiner, April 9, 1933.
66 Times, April 31, 1933. 67 Times, June 18, 1933.
in Chicago. 1934 was also the year that Benito Mussolini sent his troops against Ethiopia. On the sporting scenes in the United States, the pole vault wars were still raging.

Bernard Deacon of Stanford had the best mark in the world that year, with a leap of 14 feet 2 3/4 inches, at the All-Comers meet in Palo Alto on March 10, 1934. His mark still stands as a school record for that institution. On June 23, 1934, at Los Angeles, an unknown from little San Diego State Teachers College won the N.C.A.A. meet with a new meet record. Jack Rand was his name, and 14 feet 1 3/8 inch was the height. Two other vaulters cleared 14 feet 1 3/8 inch that same year: world record holder Bill Graber and a newcomer to the pole vaulting scene, a freshman at U. S. C. by the name of William Sefton. The other 14 foot vaulter of the year was Wirt Thompson of Yale, who sailed over that height on June 16, 1934, at Princeton, New Jersey, in winning the Princeton Invitational.

Earle Meadows, another newcomer and also a freshman at U. S. C., was competing for the Southern California Junior

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69Potts, loc. cit.
70Ibid. 71Examiner, April 29, 1934.
72Ibid. 73Potts, loc. cit.
College when he and Sefton set a new National J. C. record at the West Coast Relays with leaps of 13 feet 11 3/8 inches.\(^{74}\)

Kieth Brown, the Yale junior competing for the N.Y.A. C., had a best vault during 1934 of 13 feet 11 3/8 inches when he tied for the A. A. U. crown with Graber and Thompson,\(^ {75}\) while in Japan, Nishida also vaulted 13 feet 11 3/8 inches.\(^ {76}\) Ray Lowery of Michigan Normal cleared 13 feet 10 3/8 inches that year,\(^ {77}\) as Miller, the left-handed Olympic Champion, had a best of 13 feet 10 inches,\(^ {78}\) and Alex McWilliams from Princeton\(^ {79}\) and Frank E. Pierce from Yale\(^ {80}\) each had bests of 13 feet 9 inches.

The year 1935 saw the world record return to the East Coast, and it was to be the last time an Easterner would hold the world record in the pole vault. On June 1, 1935, at Cambridge, Massachusetts, during the I.C.A.A.A.A. championships, the superb vaulter from Yale, Kieth Brown, who also doubled as a high jumper, sailed over a crossbar resting 14 feet 5 1/8 inches in the air.\(^ {81}\) This leap wiped out Bill


\(^{75}\)A. A. U., op. cit., p. 114.  \(^{76}\)Mengoni, loc. cit.

\(^{77}\)Potts, loc. cit.  \(^{78}\)Examiner, March 11, 1934.

\(^{79}\)Times, April 29, 1934.  \(^{80}\)I.C.A.A.A.A., loc. cit.

\(^{81}\)Potts, loc. cit.
Graber's mark of 14 feet 4 3/8 inches set at the Olympic Try-outs of 1932. 82 Graber himself, earlier in the year at Santa Barbara, California, on April 27, 1935, had actually gone higher than Brown's new standard, when he lifted his body over 14 feet 5 5/8 inches. However, due to some unknown irregularity, this mark was never officially recognized. 83

The two U. S. C. sophomores, Meadows and Sefton, tied for the N. C. A. A. title with record breaking vaults of 14 feet 1 1/8 inches, 84 while Meadows had a best vault of 14 feet 3 7/8 inches in a dual meet with Stanford. 85 William Roy, of Loyola of the South, cleared 14 feet 1 inch at Alexandria, Louisiana, on May 11, 1935, 86 and a young sophomore of Dutch descent, by the name of Cornelius Warmerdam, from Fresno State College, had a best mark of 14 feet 7/8 inch in one of F. S. C.'s dual meets. 87 Oye of Japan raised his personal best to 13 feet 11 3/8 inches, 88 while the seventh best vaulter of that year was Jack Mauger from the University of California, who cleared 13 feet 10 7/8 inches. 89

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82 See page 85. 83 Potts, loc. cit.
84 N. C. A. A., loc. cit.
85 The Pittsburg Post Dispatch, May 6, 1935.
86 Potts, op. cit., p. 80.
88 Mengoni, loc. cit. 89 Post-Dispatch, April 22, 1935.
1936 was a banner year in the history of the pole vault. It was to see the staging of the last Olympic Games for a period of twelve years, and it produced a new world record in the vault.

George Varoff, a 22 year old at the University of Oregon, who was competing for his home town San Francisco Olympic Club, won the National A. A. U. title with a vault of 14 feet 6½ inches, and a new world record. Very few people had heard of Varoff before this, but overnight he was the sensation of the track world and considered an overwhelming favorite to win the Olympic Tryouts in two weeks. However, pre-meet favorites do not always win the title. And this was the case at the Final Olympic Tryouts on July 18, 1936. Varoff was probably the saddest man in America that day, as three "Trojans" carried off the honors in the pole vault. Meadows, Sefton, and Graber each cleared 14 feet 3 inches and earned a berth aboard the ship headed for Berlin.

The Berlin Games of the XI Olympiad were indeed successful; under the technical direction of the Nazi government, with their German thoroughness, the Games were almost perfect. There were 125,000 people in attendance with 5000 athletes.

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90 A. A. U., loc. cit.
91 Times, July 18, 1936.
from 52 nations competing. Adolf Hitler was basking in the limelight, using his personal appearances for propaganda means. However, the great star of the Games was not the crowds or Adolf Hitler, but Jesse Owens.92

The American vaulters, meanwhile, were having their hands full. The vaulting had been going on all day and was finally winding to a finish under the torch lights and twilight of evening. Four men had cleared 13 feet 11 3/8 inches, the two Americans, Meadows and Sefton, and the two Japanese, Nishida and Oye. The bar was then raised to 14 feet 3 1/8 inches, and in the darkness of evening, the stage was set for a dramatic climax. With the partially German crowd chanting "Nishida, Nishida, Nishida", Earle Meadows sailed over that 14 feet 3 1/8 inches for the Olympic laurels and a new Olympic record. Nishida was given second place, Oye third, and Sefton fourth, all at 13 feet 11 3/8 inches. Fifth place went to the third American vaulter, Graber, at 13 feet 7 3/8 inches, while eleven men tied for sixth at 13 feet 1 3/8 inches.93

There were other good vault marks made during 1936. Albert Hall of the University of Wisconsin had a best of 14 feet 4 inches, made in a dual meet with Ohio State at Madison.

92Grombach, op. cit., p. 125.
93Potts, op. cit., p. 15.
on May 16, 1936, while on May 2, 1936, at Los Angeles during a dual meet between The San Francisco Olympic Club and U. S. C., three men, Loring Day, Meadows, and Sefton, all of Southern California, each cleared 14 feet, with Meadows winning at 14 feet 4 inches. This was the first time in history that three men from the same school cleared 14 feet.

David Weichert of Rice Institute, in Texas, had a winning mark of 14 feet 3 inches at the Southwest Olympic Try-outs, and Oye set a new Japanese record at 14 feet 2 7/8 inches in Japan. Bud Deacon of Stanford had a best of 14 feet on the Coast.

The year 1937 produced an onslaught on the pole vault record that the world had not seen since the days of Gilbert and Dray, twenty-nine years before. The "Heavenly Twins", Meadows and Sefton of U. S. C., broke the accepted world record six times before the track and field campaign of 1937 ended. Sefton started the record breaking by scaling 14 feet 7 3/8 inches in a dual meet in Los Angeles. This shattered George Varoff's mark of 14 feet 6 1/2 inches set the year before. There was so much time consumed in remeasuring and congratulations

94 Ibid., p. 79.  
95 Examiner, May 3, 1936.  
96 Potts, loc. cit.  
97 Mengoni, loc. cit.  
98 Richardson, loc. cit.
to Sefton, that by the time Meadows was allowed to vault he was cooled off and had no chance to clear the height. Shortly thereafter, at a dual meet with Stanford at Palo Alto, Sefton again broke Varoff's official world record and his own unofficial mark, by clearing 14 feet 8 1/2 inches. This time officials saw to it that Meadows received his chance at the height. The other half of the "Heavenly Twins" sped down the runway, sailed up and over the height, brushing the bar with his elbow. The crossbar danced on the pegs, but did not fall off, and as Meadows descended into the pit below he had a share of the new world record. 99

At the N.C.A.A. championships of that year, Sefton again set a new world record with a leap of 14 feet 8 7/8 inches. 100 Sefton's record was short lived, for on May 29, 1937, at the Pacific Coast Conference Championships in Los Angeles, William H. Sefton and Earle E. Meadows each cleared a height for a new record 14 feet 11 inches. 101 Some people truly believed this would never be beaten. Both vaulters declined to try higher, either because the standards would not go higher, or they were content that the world record

99 Richardson, loc. cit.
100 N.C.A.A., loc. cit.
101 Potts, loc. cit.
should be shared by them as U. S. C. teammates.

However, it is of interest to note here that at the P. C. C. versus the Big Ten meet in Los Angeles on June 26, 1937, Meadows and Sefton won the pole vault at 14 feet 6 inches and then tried 15 feet 1 inch, the first time that 15 feet had ever been attempted in a track and field meet.\textsuperscript{102}

During the National A. A. U. Senior Outdoor Championships in Milwaukee, Wisconsin, on July 3, 1937, the greatest tie in pole vault history, up to that time, took place. Sefton and Meadows, representing Southern California Sportmen's Association, and Warmerdam and Varoff, vaulting for The San Francisco Olympic Club, each cleared 14 feet 7 5/8 inches.\textsuperscript{103} At no time before had that many men vaulted so high.

Other good marks of 1937, although completely overshadowed by the tremendous performances of Meadows and Sefton, were turned in by Jack Mauger of the University of California and The San Francisco Olympic Club. Mauger, a left handed vaulter, had a best mark of 14 feet 4 inches in winning the P. A. A. meet at Palo Alto on May 22.\textsuperscript{104} It was the highest height recorded to that date for a south-paw vaulter. Sueo

\textsuperscript{102}Examiner, June 27, 1937.

\textsuperscript{103}A. A. U., \textit{loc. cit.}

\textsuperscript{104}Potts, \textit{loc. cit.}
Oye of Japan sailed 14 feet 3 3/8 inches, which still stands as the Japanese record.\(^{105}\)

An interesting story was told this investigator by Shuhie Nishida, the Japanese Olympian, concerning Mr. Oye. During the United States' reentry onto Bataan in the Second World War, the Japanese troops that held the island were in fast retreat under the big guns of the U. S. troops. The Japanese commanding officers told their soldiers to throw everything away and travel as light as possible. Oye was killed in that battle, and when his body was found, the only personal possession he thought enough of to keep in his knapsack were his old, worn track shoes.\(^{106}\)

Also during 1937, former world record holder Keith Brown of the New York A. C., had a best vault of 14 feet,\(^{107}\) while Kiyoshi Adachi of Japan, was clearing 13 feet 11 3/8 inches,\(^{108}\) and Nikoly Ozolin of Russia became the first great vaulter from that country when he cleared 13 feet 11 3/4 inches.\(^{109}\)

Although Meadows and Sefton had both graduated from U. S. C. the previous spring, the "Trojans" were still able

\(^{105}\)Letter from Mr. Oda.

\(^{106}\)Conversation with Mr. Shuhie Nishida, Tokyo, Japan, 1951.

\(^{107}\)\textit{Times}, June 4, 1939. \(^{108}\)Potts, \textit{op. cit.}, p. 81.

\(^{109}\)Mengoni, \textit{op. cit.}, p. 108.
to produce the top vaulter of the world again in 1938. He was a tall, pink-cheeked, piano-playing senior named Loring Day, the son of a Monrovia, California, dentist.\footnote{Life Magazine, May, 1938, p. 17.} And on April 23, 1938, during a dual meet with U.C.L.A. in Los Angeles, Day recorded the fifth highest vault of all time, up to that date, by lifting himself 14 feet 7 inches into the air.\footnote{Potts, op. cit., p. 79.} He was also winner of the annual N.C.A.A. meet with a vault of 14 feet 2 inches.\footnote{N.C.A.A., loc. cit.}

The second best vaults in the world during the track and field season of 1938 were registered by Cornelius "Dutch" Warmerdam and world record sharer Earle Meadows, each with a leap of 14 feet 6 inches.\footnote{Times, June 19, 1938.} The first 14 foot Russian vaulter was unveiled that year when Ozolin cleared 14 feet 5/8 inch.\footnote{Mengoni, loc. cit.}

Five men cleared 14 feet even, in 1938. They were: William Harding of Yale,\footnote{Potts, op. cit., p. 81.} Ralph Ross of the Military Academy at West Point,\footnote{Times, April 24, 1938.} Kenny Dills a U. S. C. transfer from Modesto, California, Junior College,\footnote{Times, May 8, 1938.} Richard V. Ganslen of Columbia

\footnote{Times, May 8, 1938.}
University, and George Varoff of Oregon, the former world record holder.

Another vaulter from Japan had a noteworthy mark that year of 1938. He was Iwao Maeda, with a best height of 13 feet 11 3/8 inches.

The year 1939 saw the return of Earle Meadows as the possessor of the best height in the world for the year, at 14 feet 7 inches, while Warmerdam of The San Francisco Olympic Club had the second best mark at 14 feet 5 3/8 inches. Two college vaulters had the third best heights of 1939. Loring Day from U. S. C., and Richard Ganslen of Columbia, each had best marks of 14 feet 5 inches, with Ganslen winning the N.C.A.A. title at that height. The A. A. U. Championships were won by Varoff with a leap of 14 feet 4 inches, and Rod Hansen, a teammate of Varoff's at Oregon, also had a best mark of 14 feet 4 inches when he tied with Varoff in a dual meet with Portland, at Eugene on April 22, 1939.

Robert Cassels of the University of Chicago won the

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118 Times, July 4, 1938.  119 Ibid.
120 Potts, loc. cit.  121 Mengoni, op. cit., p. 105.
122 Examiner, April 30, 1939.  123 Times, June 11, 1939.
126 Potts, op. cit., p. 79.
1939 Big Ten Championship with a meet record vault of 14 feet 2 3/4 inches,\textsuperscript{127} while Beefus Bryan of the University of Texas,\textsuperscript{128} and Milton Padway of the University of Wisconsin,\textsuperscript{129} each had best marks of 14 feet 2 inches to their credit.

The fine Russian vaulter, Nikolay Ozolin, cleared 4.30 meters, which is 14 feet 1 3/4 inches, at Moscow on July 31, 1939, for a new U.S.S.R. record.\textsuperscript{130}

Two other American vaulters had best marks of 14 feet that year, Ralph Ross of West Point\textsuperscript{131} and Keith Monroe of the University of California.\textsuperscript{132} Also two world indoor records were set that year in the pole vault. Warmerdam cleared 14 feet 6 1/8 inches for a new world indoor record on a board runway, and Meadows leaped 14 feet 6 3/8 inches for a new world indoor record on a dirt runway.\textsuperscript{133}

This is the end of the 14 foot era of the pole vault.

It had just been a short twelve years before that Sabin Carr punctured the 14 foot ceiling. And many people thought that was as high as an athlete could go, propelled by the aid of a skinny bamboo pole. However, year by year we have seen the

\textsuperscript{127}Squire, \textit{loc. cit.} \textsuperscript{128}Potts, \textit{op. cit.}, p. 80.
\textsuperscript{129}\textit{Ibid.} \textsuperscript{130}\textit{Ibid.} \textsuperscript{131}\textit{Times}, May 21, 1939.
\textsuperscript{132}Potts, \textit{op. cit.}, p. 81.
\textsuperscript{133}\textit{ Examiner}, April 14, 1940.
record climb skyward. It took twelve years to cover 11 inches, and finally Meadows and Sefton, at 14 feet 11 inches, had stopped just short of a new number to pole vault historians, 15 feet. Would anyone ever clear that unheard of height? The year 1940 was to give the answer.
CHAPTER VII

I. THE FIFTEEN FOOT POLE VAULT

1940 TO 1958

It was growing late on the afternoon of April 13, 1940, at Berkeley, California, during a triangular meet among the University of Washington, the San Francisco Olympic Club, and the University of California. The pole vault was about the only event still being contested and only a handful of spectators had remained to watch. Three men had just cleared 14 feet 2 inches and were about to attempt 14 feet 5 inches. These men were Guinn Smith of California, Bud Deacon of the Olympic Club, and Cornelius "Dutch" Warmerdam, also of the Olympic Club. All three missed their first jumps at the new height, but on the second round Warmerdam sailed over. Smith and Deacon both missed their remaining jumps, and Warmerdam was left to himself with the bar placed at 14 feet 8½ inches. The slim high school teacher from Tuolumne, California flew over on his first try and created a new personal best.

The crossbar was then placed at the "impossible" height of fifteen feet even. Warmerdam missed his first trial, but on his second attempt, with the few track fans that were on

1Chronicle, April 14, 1940.

2Richardson, op. cit., p. 29.
hand holding their breath, he sailed over clean and true, the first man in history to clear that "impossible" height of 15 feet. He then took three tries at 15 feet 2 inches, and on his first two, came fairly close. His third attempt found him tired and missing badly.

At the National A. A. U. Championships in Fresno, California, on June 29 of that same year, Warmerdam raised his new world record another 1 1/8 inches when he cleared 15 feet 1 1/8 inches on his first attempt.

Eleven men had heights in excess of 14 feet during the 1940 track and field season. Kenny Dills of U. S. C. was the second best bamboo man of the year, when on June 7 at the Compton Invitational, Compton, California, he leaped 14 feet 8 inches, to become the fourth highest vaulter of all time to that date. Third best vaulter of the year was the former world record holder and Olympic champion, Earle Meadows, with a best vault that year of 14 feet 5 inches. Dick Ganslen, competing for the Shore A. C. of New Jersey, scaled 14 feet 4 1/2 inches, while Ralph Ross, the West Point cadet, set a new

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3Ibid. 4Examiner, April 14, 1940.
5Richardson, loc. cit.
6Potts, op. cit., p. 79.
7Examiner, April 14, 1940.
8Times, June 9, 1940.
Military Academy mark with a leap of 14 feet 2 3/8 inches at the Penn Relays. The 14 feet 2 inch vaults of Smith and Deacon have already been mentioned.

Earl Stolberg of Marquette University set a new record at that Milwaukee school when he vaulted 14 feet 1 1/2 inches in a dual meet with Purdue University on May 18, 1940, while out on the Coast, George Hoffman of Fresno State College sailed 14 feet 3/4 inch on May 11, 1940.

Two men had best heights of a fraction of an inch over 14 feet during 1940. Beefus Bryan of Texas University, at 14 feet 1/16 inch, and Carl Clark of Brigham Young University, also with a best of 14 feet 1/16 inch. The latter was the first athlete from the Rocky Mountain area to clear 14 feet in the pole vault.

Another 14 foot vaulter of 1940 was Robert Kenyon of Stanford University, who cleared that height in tying for second at the annual P. C. C. meet.

The year 1941 found "Dutch" Warmerdam breaking his own world mark two more times, and clearing 15 feet or higher a total of 10 times. 1941 also saw the United States plunge into an all-out war that was to last for four years and have

9Potts, op. cit., p. 80. 10Ibid. 11Ibid. 12Examiner, April 28, 1940. 13Potts, op. cit., p. 81. 14Ibid.
a definite effect on the pole vault marks of the world.

At Stanford University, on April 12, 1941, almost exactly one year to the day when he first cleared 15 feet, Warmerdam vaulted 15 feet 2 5/8 inches on his third trial for a new world standard.\textsuperscript{15} Two months later, on June 6, 1941, at Compton, California, Warmerdam cleared 15 feet, 15 feet 4\textfrac{1}{4} inches, and a grand high of 15 feet 5 3/4 inches.\textsuperscript{16}

Meanwhile that year, two California vaulters were dualing with each other for the supremacy of the college vault. Guinn Smith of the University of California and Willard Schaefer of the University of Southern California,\textsuperscript{17} sailed over 14 feet 6 inches, with Smith winning the West Coast Relays at 14 feet 6 3/8 inches for a new relays and University of California record.\textsuperscript{18} Schaefer's vault was made during a three way meet with U. C. L. A. and the Olympic Club, at which time he defeated Warmerdam for the "Flying Dutchman's" only defeat while he was actively competing as the world's champion.

Other 14 foot plus vaulters of 1941 were Harold Hunt of the University of Nebraska, tying for the N.C.A.A. crown with Smith at 14 feet 2 inches,\textsuperscript{19} Luther Nichols,\textsuperscript{20} a team mate of Smith's at the University of California, and Earle Meadows of

\begin{flushright}
\textsuperscript{15}Richardson, loc. cit. \\
\textsuperscript{16}Ibid. \\
\textsuperscript{17}Potts, op. cit., p. 79. \\
\textsuperscript{18}Kring, op. cit., p. 5. \\
\textsuperscript{19}Potts, op. cit., p. 80. \\
\textsuperscript{20}Potts, op. cit., p. 81.
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the Southern California Sportsmen's Association, both with a best of 14 feet even.

At the start of the track season of 1942 the news from the war front was bleak, indeed. The United States was still waging a defensive battle and back home the war production was in full swing. Military enlistments had not begun to completely affect athletic performances yet. Warmerdam continued his unparalleled record-breaking performances. He cleared 15 feet 14 times during 1942, and climaxed his drive upward with his all-time outdoor best vault of 15 feet 7 3/4 inches at the first annual California Relays, Modesto, on May 23, 1942. Also during 1942, Warmerdam vaulted 15 feet 7 3/4 inches indoors for a new world indoor standard. Willard Schaefer of U. S. C. was the second best vaulter in the world that year, with a leap of 14 feet 6 inches made at the West Coast Relays. A. Richmond Morcom, a young lad from the University of New Hampshire, cleared 14 feet 4 1/2 inches indoors, while Defield of Minnesota topped 14 feet 4 inches for second place behind Warmerdam in the

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21Times, June 30, 1941.
22Richardson, loc. cit.
23West Coast Relays Program, loc. cit.
24Kring, loc. cit.
A. A. U. outdoor championships.25

The number one vaulter outside the United States in 1942 was a Japanese by the name of Bunkichi Sawada, who leaped 14 feet $\frac{1}{2}$ inches on August 12, 1942.26 Harold Hunt of the University of Nebraska set a Big Six mark at Lincoln, Nebraska, with a vault of 14 feet $\frac{5}{8}$ of an inch.27 Irving Moore of Piedmont, California, a first year student at Santa Rosa Junior College in California, flew higher than any other J. C. vaulter before when he cleared 14 feet for a new National J. C. record.28 The seventh best vaulter of that year was Howard Jensen of Temple University, at 13 feet 10$\frac{1}{2}$ inches.29

Strange sounding names were prominent in the news during the war year 1943. Such names as Bougainville, Truk, Rabaul, Oran, Vichy French, Panzer, and the "Desert Fox." The war was beginning to make a dent on athletic performances in America, although a few of the best pole vaulters were able to participate in some meets, competing for their military or naval organization. Warmendorf himself went into the naval service as an instructor at Del Monte Preflight School in

25Potts, op. cit., p. 80.
26Ibid.
27Ibid., p. 52.
28Kring, loc. cit.
29Potts, op. cit., p. 81.
California. Although he cleared 15 feet sixteen times during 1943, more than any other year, he competed in only seven outdoor meets. Warmerdam's winning heights outdoors were: 15 feet at the National A. A. U. meet in New York, 15 feet 1 3/4 inches at Berkeley, 15 feet 2 inches at Chapel Hill, North Carolina, 15 feet 2 1/2 inches at Modesto, California, 15 feet 3 inches at San Francisco, and his best outdoor mark of the year, 15 feet 4 inches at the Central District A. A. U. meet in Chicago, on July 2, 1943. 30 The "Flying Dutchman's" best indoor mark that year resulted in a new world indoor record when he jumped 15 feet 8 1/2 inches at the Chicago Relays, March 20, 1943. 31

There were only four other men who vaulted over 14 feet during the year 1943. Irving Moore, the Santa Rosa Junior College athlete competing for the San Francisco Olympic Club, cleared 14 feet 6 inches at the U. S. Army Air Force Aid Society Meet in San Francisco on July 17, 1943. 32 As mentioned before, Warmerdam vaulted 15 feet 3 inches in that meet.

Jack Defield of Minnesota was the best college leaper in the land with a winning height of 14 feet 1 inch at the N.C.A.A. Championships, in which he successfully defended his title. 33 Dick Ganslen, vaulting for the U. S. Army Signal

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30 Richardson, loc. cit. 31 Ibid. 32 Potts, op. cit., p. 79. 33 N.C.A.A., loc. cit.
Corps, had a top mark of 14 feet $\frac{1}{2}$ inch, while A. Richmond "Boo" Morcom of New Hampshire cleared 14 feet even. Kieth Grosiwrd of the San Francisco Olympic Club, scaled 13 feet 10 inches that season of 1943.

The year 1944 saw the tide of the war beginning to turn. The big news came from the Coast of France when, on June 6, 1944, D-Day, the invasion of France, began by the Allied forces. The total Allied strength available, 2,876,439 men, were led by General Dwight D. Eisenhower as Supreme Commander.

The pole vault performances of 1944 were at the lowest ebb in a long time. Not since the war years of 1917-1918 were the top marks of the world so far below the performances of the previous years. Warmerdam, vaulting for the Monmouth Preflight, competed in only two meets that year, the National A. A. U. Championships in New York City, which he won at 15 feet, and the Drake Relays where he cleared 14 feet 7 3/4 inches. It was the last competitive vaults that the great champion ever made.

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34 Official Program National A. A. U. Championships, New York, June 20, 1943.

35 Ibid.

36 Ibid.

37 World Almanac, op. cit., p. 525.

38 Richardson, loc. cit.

39 World Almanac, 1945, p. 800.
In retrospect here a moment, we might take a look back into the five year, 15 foot career of this immortal pole vaulter. By clearing 15 feet on April 13, 1940, Warmerdam was the first vaulter to completely destroy the fallacy that a fifteen foot vault was impossible. Not until eleven years later did another vaulter clear that height. He was the first and only athlete in the world, in any event, to surpass the previous world record 43 times. He was the first and only athlete, in any event, to establish twenty-two American stadium and auditorium records. He was the first and only vaulter able to guarantee a 15 foot vault each time he took hold of a bamboo pole indoors, outdoors, daytime, evenings, and in any section of the United States. He was so sure of his ability to clear 15 feet any time, that he never vaulted higher than 13 feet 10 inches in practice and never took a practice vault once the outdoor track and field season started.40

Warmerdam was an amateur in the strictest sense of the word and a worthy recipient of the James E. Sullivan Memorial Award, given annually to the "amateur athlete who, by performance, example, and good influence, did most to advance the cause of good sportsmanship during the year."41

40Richardson, loc. cit.

41From the A.A.U.'s James E. Sullivan Memorial Award, as cited by Richardson, loc. cit.
At no time in history has any athlete been so far advanced over his competitors in any field of sport. For Warmerdam was at the very top and no one else was even close to him. As Nat J. Cartmell, Pennsylvania star sprinter in 1906-07-08, said, "Warmerdam is the only all-time indisputable, supreme champion, the athletic world has ever known."\(^{42}\)

Outside of Warmerdam's marks, the next best vaults of 1944 were turned in by four Europeans. Two of them were from neutral countries not participating in the war. Ozolin of Russia had the best mark with a top performance of 13 feet 9 3/8 inches.\(^{43}\) Hultkvist of Sweden cleared 13 feet 5 3/8 inches,\(^{44}\) J. Bem of Czechoslovakia, 13 feet 3 3/8 inches,\(^{45}\) and Hofstetter of Switzerland, 13 feet 1 3/8 inches.\(^{46}\)

The top "non-Warmerdam" mark outdoors in the United States that year was but 13 feet and was cleared by thirteen different men. Three of the thirteen had better marks indoors, however. Defield of Minnesota was National A. A. U. champion at 14 feet, and Milton Padway, the former Wisconsin star, competing unattached, was runner-up at 13 feet 6 inches,\(^{47}\) while John Schmidt of Ohio State won the Big Ten title at 13

\(^{42}\)Ibid.

\(^{43}\)Mengoni, op. cit., p. 108. \(^{44}\)Ibid., p. 96.

\(^{45}\)Ibid., p. 28. \(^{46}\)Ibid., p. 99.

\(^{47}\)World Almanac, op. cit., p. 799.
feet 6 inches. 48

The year 1945 saw the end of the Second World War and the beginning of a new age, the Atomic Age. The track and field season of that year was still conducted under wartime conditions and the marks were only a little better than the previous year.

The best vaulter in the world in 1945 was William Moore of Western Michigan College, who won the Drake Relays pole vault title at 14 feet, 49 the only 14 foot vault of the year. John Schmidt of Ohio State had the second best mark at 13 feet 10 inches, 50 while Milton Padway, the former Wisconsin vaulter, in the Army and competing for the New York Engineers, won the Penn Relays with a leap of 13 feet 9 inches. 51

The fourth best height in the world during 1945 was turned in by Ray Kring, an ex-Marine freshman at the College of the Pacific, Stockton, California. Kring was undefeated on the Pacific Coast that year and at the California Relays sailed 13 feet 7 3/4 inches for a new Relay's freshman record. Meanwhile, five men cleared 13 feet 6 inches that year: Morcom of Fort Benning, Georgia, Robert Phelps of the University of Illinois, Dick Vanderhoof of Pomona College in

48 Ibid., p. 802.
51 Ibid.
California, and Fred Winters and Irving Moore of Kingsville Naval Air Station. 52

Post war track and field marks of 1946 were showing steady improvement. Four men had vaults of 14 feet or better, with little Irving Moore of the San Francisco Olympic Club, the best in the world at 14 feet 4 3/4 inches. 53 Moore made his leap at the National A. A. U. finals in Alamo Stadium, San Antonio, Texas. Second in that meet with the next best vault in the world was Guinn Smith, the University of California champion who had had a four year layoff while flying for the U. S. Army. Smith, also vaulting for the Olympic Club, cleared 14 feet 1 3/4 inches in that meet. 54 The other two 14 foot vaulters of 1946 were two team mates at U. S. C. Fred "Tex" Winters, with a best of 14 feet 1 1/2 of an inch at the Pasadena Games, and Robert Hart, a former North Hollywood High School star, with a top leap of 14 feet even at the Compton Invitationals. 55

Two athletes from Scandinavian countries had the next best heights of 1946. Erling Kaas of Norway had a top mark of 13 feet 9 3/4 inches, while Allan Lindberg of Sweden

52 Ibid.
54 Ibid.
55 Potts, op. cit., p. 81.
cleared 13 feet 9 3/8 inches.\textsuperscript{56}

The seventh best height in the world during 1946 was registered by Ray Kring of the College of the Pacific, who was the top small-college vaulter in the land with a best of 13 feet 9 inches.\textsuperscript{57} Clearing 13 feet 8 inches that year were two vaulters from the Big Ten, Robert Richards of the University of Illinois and Billy Moore of Northwestern. Moore, who had transferred from Western Michigan College, won the N.C.A.A. that year at 13 feet 8 inches.\textsuperscript{58}

Twelve men cleared 14 feet or higher during the track and field season of 1947. Guinn Smith of the Olympic Club was number one in the world with a vault of 14 feet 7 3/8 inches, made during the California Relays in May, 1947.\textsuperscript{59} Second best vaults that year were turned in by Morcom, who won the Penn Relays at 14 feet 3 inches,\textsuperscript{60} and the veteran Earle Meadows, competing for the San Antonio A. C., who also cleared 14 feet 3 inches that year.\textsuperscript{61} Tom Bennett of the University of Wisconsin leaped 14 feet 2\(\frac{1}{2}\) inches against Iowa in a dual meet,\textsuperscript{62} while George Rasmussen, a freshman at the University of Oregon, cleared 14 feet 2 inches in a dual meeting with

\begin{flushright}
\textsuperscript{56}Amateur Athlete, loc. cit.
\textsuperscript{57}Ibid. \textsuperscript{58}Ibid.
\textsuperscript{59}Track and Field News, February, 1948.
\textsuperscript{60}Ibid. \textsuperscript{61}Ibid. \textsuperscript{62}Ibid.
\end{flushright}
Oregon State College. Robert Richards of the University of Illinois, while competing with a touring American track team in Sweden, sailed over 14 feet 1 inch at Stockholm, on August 6, 1947.

Ray Maggard of U.C.L.A. leaped higher with an aluminum pole than anyone before or since, when he cleared 14 feet 3/4 of an inch in the U.C.L.A. - U. S. C. annual meet.

Five other vaulters cleared 14 feet during that year of 1947. Billy Moore of Northwestern University had a best of 14 feet ½ inch, while Bob Hart of U. S. C., John Montgomery of the L.A.A.C., Fred Winter of the L.A.A.C., and Ray Kring of the College of the Pacific, all cleared 14 feet at the West Coast Relays. Kring again cleared 14 feet in tying for second with Earle Meadows at the Pasadena Games. Smith won that meet at 14 feet 3 inches, the same height he cleared at the West Coast Relays.

The return of Olympic competition was the big news item to the athletic world of 1948. And the four best pole vault marks in the world that year were turned in at the American Olympic Tryouts, at Northwestern University, Evanston, Illinois. First place in the tryouts was shared by A. Richmond

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63 Ibid. 64 Ibid. 65 Ibid. 66 Ibid. 67 Ibid. 68 Ibid.
Morcom and Guinn Smith, as each cleared 14 feet 8 1/8 inches. Morcom was actually awarded the first place on fewer misses. Third place in the tryouts went to Robert Richards of the Illinois A. C., with a vault of 14 feet 6 1/8 inches, while the fourth place man, John Montgomery of U. S. C., did not even make the Olympic team, even though his height of 14 feet 4 1/8 inches was better than Earle Meadow's Olympic record.

The XIV Olympiad in London marked the return of Olympic competition after an absence of twelve long years. The opening of the Games was impressive, with 6,000 athletes from 59 countries and a capacity crowd of over 82,000 people. As the Royal trumpeters sounded their horns, and the Scottish Highlanders began to play, out walked King George VI, Queen Elizabeth, and other members of the British court. The Olympic torch was lit and the XIV Olympiad of the modern era was under way.

The pole vault event in the 1948 Olympic Games was as dramatic an event as was ever witnessed in the history of track and field. It had been raining all day in London on the day of the pole vault finals, August 2, 1948. The runway was a sea of mud, and the vaulters huddled under whatever

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69 Track and Field News, December, 1948.
70 Ibid.
71 Grombach, op. cit., p. 126.
protection could be found. Their main concern was to keep their poles dry. Three men had cleared 13 feet 9 3/8 inches, and remained in the competition. They were Guinn Smith and Bob Richards of the United States, and Erkki Kataja of Finland.72

The bar was then raised to 14 feet 1 1/4 inches and all three vaulters missed twice. On the final round Richards and Kataja were both eliminated and Smith was left with one remaining vault. If Smith missed his last vault at this height, the Finn, Kataja, would be the winner on the International rule of least number of misses, and the United States would lose its first Olympic pole vault title. On Smith's first two attempts at 14 feet 1 1/4 inches his pole did not feel right, so for his last try he selected one of the poles that the Japanese pole vaulters had sent over to the Games as a gift to the American vaulters.73 The tall, lean Californian splashed down the waterladen runway with the new bamboo stick in his hands. He stabbed the pole into the soggy box, flew upward, and rolled over the bar with another Olympic pole vault victory for Uncle Sam.74

72Potts, op. cit., p. 15.

73The Japanese were not allowed to enter these first Games after the war, and since the Japanese pole vaulters had always done well in the Olympics and had great competition with the American vaulters in the past, they felt that by giving the U. S. vaulters the hard to get bamboo poles, they could at least be there in spirit.

74Examiner, August 3, 1948.
The place winners in the Games' pole vault behind Smith were: Erkki Kataja, second at 13 feet 9 3/8 inches, Robert Richards, third at 13 feet 9 3/8 inches, Erling Kaas of Norway, fourth at 13 feet 5 3/8 inches. Fifth place went to Ragnar Lundberg of Sweden, at 13 feet 5 3/8 inches, while A. Richmond Morcom, the pre-Games favorite from the U. S. A., was sixth at 12 feet 11 1/2 inches.75

The other top marks of 1948 went to Lundburg, who on September 26, at Södertälje, went over 14 feet 3 5/8 inches,76 George Rasmussen of Oregon, who won the Northern Division of the P. G. C. with a leap of 14 feet 2 1/2 inches,77 Kaas, who cleared 14 feet 1 5/8 inches against Denmark,78 and Harry Cooper of Minnesota, who cleared 14 feet 1 1/8 inches in a dual meet with the University of Iowa.79

There were four other vaulters that scaled the 14 foot horizon that season. William Larson, a right footed vaulter from Stanford University, cleared 14 feet at Palo Alto on April 17, 1948, in a dual meet with the Olympic Club.80 Bob Hart of U. S. C. and Warren Bateman of Colorado University tied for the N.C.A.A. title with vaults of 14 feet,81 and Earle Meadows managed 14 feet in the Coliseum Relays.82

75Potts, loc. cit.
76Track and Field News, loc. cit. 77Ibid. 78Ibid.
79Ibid. 80Ibid. 81Ibid. 82Ibid.
A new type of pole vaulting pole made its appearance during the year 1948. Not since 1908, when the bamboo pole was introduced in mass, had anything been accepted as a suitable vaulting instrument, with the possible exception of the aluminum pole. The aluminum pole's existence was short-lived, and except for use by high school vaulters and a few college vaulters during World War II when good bamboo was scarce, the light weight metal pole never caught on. This was not the case, however, with the Swedish steel tapered vaulting pole.

Robert Giegengack, track coach at Yale University and the man that introduced these new poles to the United States, lists some of the advantages of this new pole in a letter dated November 29, 1948, to Earl R. Jackson, track coach at the College of the Pacific:

I list here some of the advantages over the bamboo pole:

1) It has better balance and is lighter than any bamboo pole of similar length.
2) Seven of our vaulters of different weights and heights prefer it over our bamboo poles (25) and our three aluminum poles. It supports a man of 210 lbs.
3) It has at least as much spring as the bamboo. The aluminum has no spring and is a dead heavy instrument.
4) It could last a lifetime and does not need to be boxed to send out of town. It is impervious to changes of temperature.
5) In past years, when our men used bamboos, each man had his favorite and when this cracked, the athlete suffered a psychological loss of confidence to say nothing of the accident hazard of a patched pole.
6) All our opponents used it and discarded their own poles to use ours in competition. Many of them reached new heights.83

It was a Yale man, A. C. Gilbert, that introduced the bamboo pole into collegiate circles, and with all the contributions that Yale University has made to the progress in the pole vault, it seems only fitting that they be the first ones to show this latest advance in pole vault equipment to the United States.

Soon after their initial use at Yale, steel poles saw universal use throughout the nation. Practically every high school in the country has one of these Swedish steel poles as a part of its athletic equipment, and most of the nation's top vaulters have used them.

During a tour of Japan in the summer of 1951 with an American track team, this investigator brought two Swedish steel poles with him. They had never before been seen in that island country of great pole vaulters, and they were looked upon with great interest and curiosity. Before returning to the United States, the investigator gave one of the poles to a Japanese vaulter. Word has been received that that pole is still being used at one of the universities near Tokyo.

The Nuremberg war crimes trials, which began in 1945, ended in the spring of 1949 with the convictions of nineteen former officials of the Nazi Foreign Office. In 1949, V. M. Molotov was relieved as Soviet Foreign Minister and replaced by Deputy Foreign Minister Andrei Vishinsky. While on July 29, 1949, Robert Richards of the Illinois A. C. sailed 14 feet 9 1/8 inches in the pole vault, for the highest vault in the world that year. John Montgomery of U. S. C. went over the bar set at 14 feet 7 3/8 inches to win the Inglewood, California Invitationals, while George Rasmussen of Oregon University cleared 14 feet 6 inches in the Klamath Falls Invitational, for the third best mark of the year.

The fourth best height of the year 1949 was turned in by Walter Jensen of the Modesto Junior College, Modesto, California, when he set a new National Junior College record with a leap of 14 feet 3 1/8 inches. Robert Smith of San Diego State College, whose uncle was National champion back in 1925, vaulted 14 feet 3 inches in the N.C.A.A. meet in Los Angeles, to score an upset victory. Tom Bennett of the University of Wisconsin cleared 14 feet 2 1/8 inches that year, while an

84 World Almanac, op. cit., p. 199.
85 Track and Field News, October, 1949.
86 Ibid.
87 Ibid.
88 Ibid.
89 Ibid.
90 Ibid.
unknown youngster from the University of Illinois, Donald Laz, was leaping 14 feet 1 3/4 inches.91

Best marks of the year 1949 were also turned in by Martin Korik of the University of Tennessee, at 14 feet 1 5/8 inches,92 Ragnar Lundberg of Sweden, 14 feet 1 3/8 inches,93 George Mattos of San Jose State College, 14 feet 1 3/8 of an inch,94 and Jack Rowan of U. S. C., Donald Cooper of Nebraska, William Carroll of the University of Oklahoma, and Bill Larson of the Olympic Club, all with personal bests of 14 feet.95

On July 3, 1950, at Tempere, Finland, Robert Richards of the United States leaped 14 feet 11 3/8 inches,96 for a non-Warnerdarn "world record," and the second highest vault, to that date, in history. The second highest vault of the year went to a European. Ragnar Lundberg of Sweden, cleared 14 feet 5 1/4 inches at Goteborg, on August 10, 1950, and in doing so set a new record for Europeans.97 The third best vaulter of 1950 was Bobby Smith of San Diego State College. In a dual meet with Arizona, at Tempe, Arizona, Smith won the pole vault with 14 feet 5 inches, a personal best and an Aztec school record.98

91 Ibid. 92 Ibid. 93 Ibid. 94 Ibid. 95 Ibid. 96 Track and Field News, November, 1950. 97 Ibid. 98 Ibid.
Two other top vaulters had best marks of 14 feet 5 inches during the 1950 track and field campaign: Bill Carroll of Oklahoma and the Spartan musician from San Jose State, George Mattos. Three men cleared 14 feet 4 inches. They were Montgomery of the L.A.A.C., Jensen, the National J.C. record holder who had enrolled at U.S.C., and Rasmussen, the tall, slender Oregon boy.

The ninth best height of 1950 belonged to Don Laz of Illinois, at 14 feet 3 5/8 inches. However, during an inter-squad meet held in the Illinois fieldhouse in early March of 1950, Don Laz unofficially vaulted 15 feet, to become the second man in history to clear that height. The "This World" section of the San Francisco Chronicle, relates the incident:

A hunch paid off for Don Laz last week. The 20-year-old University of Illinois junior had just cleared 14 feet 4 inches in the pole vault during an intramural track meet when the inspiration seized him. Without trying in between, he asked the officials to move the bar up to 15 feet, the coveted dream height of all pole vaulters.

There had been only one man who had ever cleared that height. Cornelius (Dutch) Warmerdam had done it first in 1940 when he was 26 and had succeeded in doing it 43 times, reaching 15 feet 8 and 3 inches, before he retired. No one else had come close.

Laz missed his first two attempt last week. But on the third he found the extra push and vaulted easily over the bar and into fame. For him the explanation was simple:

99 Ibid. 100 Ibid. 101 Ibid.
"I just felt like I could do it this time," he said. And in Fresno, California, Warmerdam greeted the news that he was no longer the world's only 15-footer calmly: "It couldn't last forever," he said.\textsuperscript{102}

Ten other pole vaulters cleared 14 feet or higher during that track season of 1950.

During the track and field season of 1950, Robert Richards introduced another new metal vaulting pole, the Giltal Vaultmaster. This pole was made in America by the Harry Gill Athletic Company of Urbana, Illinois, and was made of a special alloy. It was not as small in diameter as the Swedish steel pole but resembled more the old bamboo poles both in performance and shape. It was very flexible and possessed a great deal of action and snap. H. B. Marett relates the Giltal story in the Harry Gill Company athletic catalog, of 1958-59:

\begin{quote}
.. .The Gill Co. first introduced an aluminum vaulting pole in 1932--26 years ago, in a search to find a metal material that would replace bamboo. The early metal poles were unsatisfactory and little progress was made before World War II.

In 1948 Gill engineering and Alcoa developed an alloy tube of brass and aluminum with just the right amount of delayed snap action for vaulting. Dozens of trial poles were made up in the next two years and it was in April of 1950 that our company was proud to announce a pole had been developed--The Giltal Vaultmaster--that would revise the 15' vault.\textsuperscript{103}
\end{quote}

\textsuperscript{102}The San Francisco Chronicle, "This World" section, March, 1950.

This pole, like the Swedish one, was immediately accepted by the vaulters of the country, and was destined to be the one used by the new world champion.

Also at about this time, a revolutionary new laminated glass pole was unveiled by a firm in Southern California that was in the business of manufacturing masts of laminated fiberglass for sailboats. These poles became the rage of the country, and the firm was selling them by the hundreds. Their popularity died as quickly as it was born, however, when it was found that the poles were fine when new, but with constant use they became more and more limber until they would snap.

The track and field year of 1951 saw Warmerdam's private realm invaded by three different vaulters. Fifteen feet, once looked upon as impossible, and a height heretofore scaled only by the incomparable "Dutch" Warmerdam, was cleared by two college vaulters the same day in two different meets, separated by thousands of miles.

On April 21, 1951, at the Kansas Relays in Lawrence, Kansas, Nebraska's Donald D. Cooper, whose best previous outdoor mark before that day was 14 feet 1 inch, sailed over 15 feet 1/8 inch. Undaunted by the cold and wet weather, Cooper first cleared 14 feet 6 inches. The bar was then raised to 15 feet 1/8 of an inch, and the Nebraskan made it on his second try, establishing a new intercollegiate mark. The
record did not last long, however. 104

That same afternoon, in the Los Angeles Coliseum, U. S. C. was meeting the Universities of Illinois and Michigan in a triangular meet. Bert Nelson, in his fine paper, the Track and Field News, reports the action:

Two hours after the public address system told of Don Cooper's new national collegiate vault record, blonde Don Laz of Illinois stood beyond the end of the runway, looking at the cross bar 145 feet distant.

He nervously spat on his hands seven times, tucked his head against his shoulder in a moment of calming contemplation, then grasped his newly taped pole, sped down the runway and soared into the air. As he tumbled to the pit the roar of 9197 voices told him the cross bar remained on its pegs, 15 feet 1 3/4 inches above the ground. 105

The third vaulter to leap into the magic circle of 15 foot pole vaulters was Bob Richards of the L.A.A.C. On May 11, 1951, Richards sailed 15 feet 1/2 inch at the Rocky Mountain A. A. U. meet. 106 Fourth best mark in the world was turned in by Walt Jensen of U. S. C., who was Southern Pacific A. A. U. champion with a leap of 14 feet 6 inches, an all-time record for the Alameda, California boy. 107

Bobby Smith of San Diego State had a best of 14 feet 4 inches that year, established in winning the California Collegiate Athletic Association meet, 108 while Pyotr Denisenko

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104Track and Field News, April, 1951. 105Ibid.
106Track and Field News, November, 1951.
107Ibid. 108Ibid.
of the Soviet Union also had a best vault of 14 feet 4 inches, made at Kiev, U.S.S.R.\textsuperscript{109}

The highest vault ever recorded by a Negro vaulter was turned in during 1951 by Richard Coleman of the University of Illinois. The husky, left-handed Illinois Athlete cleared 14 feet 3 inches on March 3, 1951, indoors off a dirt runway.\textsuperscript{110}

The remaining two top vaulters of the 1951 season were Leroy Poucher of the University of Florida, who set a Southeastern Conference record with a leap of 14 feet 2 7/8 inches at Birmingham, Alabama, on May 19, 1951, and Torfi Bryngairstsson of Iceland, who had a best pole vault mark of 14 feet 2 1/8 inches.\textsuperscript{111}

Twelve other pole vaulters cleared 14 feet or higher during the 1951 campaign.

The Olympic year of 1952 found Robert Richards clearing 15 feet twice. At the Canadian National Championships of August 30, 1952, Richards gave an exhibition and leaped 15 feet 1/8 of an inch. Two days later at Toronto, he officially sailed over the bar at 15 feet 1 1/8 inches, for the best mark in the world that year.\textsuperscript{112}

The XV Olympiad was held in Helsinki, Finland, and was an imposing spectacle presented in a stadium of modern Finnish

\textsuperscript{109}Ibid. \textsuperscript{110}Track and Field News, May, 1951.
\textsuperscript{111}Ibid. \textsuperscript{112}Track and Field News, November, 1952.
architecture reminiscent of the ancient Olympic Games. The Olympic flame never burned brighter than in 1952 and the XV Olympiad presented more nations, more competitors, better competition, and greater world interest than any other.\footnote{Grombach, \textit{op. cit.}, p. 129.}

The pole vaulting performances in the Games were superb, also, with no less than four men sailing higher than the previous Olympic record. The champion was Bob Richards at 14 feet 11\frac{1}{2} inches, with Don Laz second at 14 feet 9 1/8 inches. Ragnar Lundberg of Sweden was third with a leap of 14 feet 6\frac{1}{2} inches, while the Russian, Pyotr Denisenko, was fourth, also at 14 feet 5\frac{1}{2} inches. Valto Olenius of Finland vaulted 14 feet 1\frac{3}{4} inches for fifth place, and Bunkichi Sawada of Japan leaped 13 feet 9 inches to capture sixth place.\footnote{Track and Field News, August, 1952.} Actually, Sawada tied with three other vaulters, but was awarded sixth place on fewer misses.

The rest of the vaulting during 1952 was outstanding. Laz had a best height of 14 feet 11 7/8 inches, made at Oslo, Norway, on July 30, 1952,\footnote{Track and Field News, November, 1952.} and Don Cooper, who was considered a strong choice to make the American Olympic Team, injured an ankle while working out after making a best 1952 vault of 14 feet 9 inches at the West Coast Relays.\footnote{Ibid.}
Ragnar Lundberg raised the best mark made by a European to 14 feet 6 3/4 inches, and Denisenko was right behind him with a best leap of 14 feet 6 inches. George Mattos came up with a personal best of 14 feet 5 3/8 inches in making the American Olympic team. Dick Coleman set an unofficial world record for left handed pole vaulters by clearing 14 feet 5 inches. Bobby Smith of San Diego and Jack Rowan of U. S. C. each had bests of 14 feet 4 inches, while Bryngeirsson of Iceland set a new Icelandic record at 14 feet 3 1/2 inches to wind up the top vaults of 1952.

The Rev. Robert Richards was again the highest pole vaulter in the world in 1953. Richards cleared 15 feet 1/2 of an inch in winning the Coliseum Relays in May and then again in September, at the Canadian National Championships, sailed over 15 feet 1/2 of an inch.

A red headed, ex-soldier from Turlock, California, Fred Barnes, who was a student of Cornelius Warmerdam's at Fresno State College, shared the number two position in the pole vault world of 1953, with a leap of 14 feet 8 inches.

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117Ibid. 118Ibid. 119Ibid. 120Ibid. 121Ibid. 122Ibid. 123Track and Field News, November, 1953. 124Ibid.
The other 14 foot 8 inch vaulter that year was the likeable, easy going, George Mattos, the ex-San Jose State College and Olympic Club star, who was competing for Mike Ryan and his newly formed Santa Clara Youth Center near San Jose, California.  

Denisenko, the U.S.S.R.'s number one leaper, tied Lundberg's European native record when he cleared 14 feet 6 3/4 inches at Kiev, on June 21, 1953.

Robert Smith, the former San Diego State College athlete, was in the U. S. Marine Corps and vaulting for Camp Pendleton when he tied for first at the West Coast Relays at 14 feet 4 inches. Lundberg's best that year was but 14 feet 3 1/2 inches, which he cleared in gaining second behind Denisenko's winning mark of 14 feet 5 1/4 inches at Stockholm.

Among the top vaulters of 1953 was Paul Harrington of Notre Dame, with a best vault of 14 feet 3 1/8 inches; his father also pole vaulted for the "Fighting Irish" and was one of the best in the world in the late 1920's. Dick Shivers, a former Occidental College student, competing for the San Diego Naval Training Center, had a 14 foot 3 inch vault to his credit and Ray Kring of the San Francisco Olympic Club, recorded a personal record with a leap of 14 feet 2 7/8 inches in winning the Pacific Association Championships at

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125Ibid.  
126Ibid.  
127Ibid.  
128Ibid.
Stockton, California.  

Richards retained his ranking as the number one pole vaulter of the world during 1954. He had four leaps of 15 feet or higher, with a top mark of 15 feet 3 1/2 inches, made in capturing his sixth Senior National A. A. U. Outdoor Championship at St. Louis. Another 15 footer that year, and with the second best vault in the world for 1954, was the former Illinois University champion, Don Laz. Laz, competing unattached, leaped 15 feet 2 inches for first place at the Ohio Relays on April 17, 1954. The third best mark of the year went to Bobby Smith of the L.A.A.C., who cleared 14 feet 8 3/8 inches in finishing second behind Richards in the A. A. U. meet, while Denisenko vaulted higher than anyone on that side of the Atlantic had before when he won the U.S.S.R. Championship's vault with a jump of 14 feet 7 5/8 inches.

Earl Poucher of the University of Florida, and a younger brother of vaulter Leroy Poucher, had a best of 14 feet 7 1/2 inches, made against Auburn, and Fred Barnes of Fresno State College, cleared 14 feet 6 inches against San Jose State College.

Two Scandinavian vaulters made bests of 14 feet 5 1/2 inches during the European Championships. They were Eales

129 Ibid.  
130 Track and Field News, November, 1954.  
131 Ibid.  
132 Ibid.  
133 Ibid.  
134 Ibid.  
135 Ibid.
Landstrom of Finland and Ragnar Lundberg of Sweden.\footnote{136} Jerry Welbourn, former Ohio State University vaulter, competing for an American track team touring England, won the British Games with a leap of 14 feet 5 inches.\footnote{137}

Geoff Elliott of England cleared 14 feet during that year of 1954 to become the first Englishman over that height.\footnote{138} 1955 was again Richard's year, as he led the pole vaulters of the world with four 15 foot plus vaults. His best height of the year was 15 feet 3 inches made at the California Relays in Modesto, California.\footnote{139} The year 1955 saw another 15 foot pole vaulter added to the ever growing list. A big, six foot three inch, 190 pound youth from New Jersey, a Sophomore at Villanova by the name of Donald Bragg, cleared 15 feet 1 inch at the annual N.C.A.A. Championships.\footnote{140} Bragg, who was known as "Tarzan" to his friends because of his fondness for swinging through trees as a youngster, was built along the lines of another great champion, Bill Sefton.

Bobby Smith sailed 14 feet 11 inches for his best all-time mark at a special Pan-American Games' tryout in Los Angeles on February 5, 1955.\footnote{141} Don Laz leaped 14 feet 10

\footnote{136}{Ibid.} \footnote{137}{Ibid.} 
\footnote{138}{Track and Field News, July, 1954.} \footnote{139}{Track and Field News, November, 1955.} \footnote{140}{Ibid.} \footnote{141}{Ibid.}
inches at the Coliseum Relays, while two team mates at U. S. C., Ronnie Morris, former National Interscholastic record holder, and Walt Levack each scaled 14 feet 9 3/4 inches in the U. S. C. - Stanford dual meet at Palo Alto.\textsuperscript{142}

Eeles Landstrom of Finland, during an international meet with Germany, at Helsinki, on August 24, 1955, cleared 14 feet 9 1/8 inches for a new European record.\textsuperscript{143} Jerry Welbourn, competing unattached, had a best height of 14 feet 8 inches, and Ragnar Lundberg topped 14 feet 7 1/2 inches during the Swedish international meet with Rumania.\textsuperscript{144}

The Olympic year 1956 found four men clearing over 15 feet, eight others clearing over 14 feet 8 3/4 inches, while 50 other pole vaulters in the world went 14 feet 1 inch or better. The two top marks of the year were turned in by Richards and a newcomer to the "Club 15," Robert Allen Gutowski, a six foot, 145 pound, 21 year old Junior at Occidental College. Richards and Gutowski each cleared 15 feet 5 inches at an Olympic warm-up meet at Santa Ana, California, on October 27, 1956.\textsuperscript{145} Gutowski's leap set a new intercollegiate record, wiping out the mark of 15 feet 3 3/4 inches set by Don Bragg earlier in the year at the Pacific Association

\textsuperscript{142}Ibid.\textsuperscript{143}Ibid.\textsuperscript{144}Ibid.\textsuperscript{145}Track and Field News, January, 1957.
meet in Stockton, California.  

Ronnie Morris of U. S. C. became the seventh man in history to clear 15 feet when he sailed over 15 feet $\frac{1}{4}$ of an inch at the Compton Invitational in Compton, California.  

George Mattos, who had been out of competition for a year while with the United States Air Force in Alaska, sailed over 14 feet $10\frac{1}{2}$ inches in the Final Olympic Tryouts to win his second berth on an American Olympic team, set his best of life mark, and the fifth best vault in the world during 1956. 

Eeles Landstrom, the Finnish champion, enrolled at the University of Michigan and won many Midwest meets for the Wolverine, including the Big Ten title at 14 feet 6 inches. He then returned to his homeland during the summer and, in a meet with Germany, went over the bar at 14 feet 9 1/2 inches. Another European, Georgios Roubanis of Greece, who was matriculating at U.C.L.A., had a best of 14 feet 9 1/2 inches that year.

Earl Poucher had a best height of 14 feet 8 3/4 inches, while Welbourn, unattached, Barnes of the Olympic Club, Laz, unattached, and James Graham of Oklahoma A. and M., each cleared 14 feet 8 1/2 inches.  

\[\text{References:}\]

146 Ibid.  
147 Ibid.  
148 Ibid.  
149 Ibid.  
150 Ibid.  
151 Ibid.
The 1956 Olympic Games were held in Melbourne, Australia between November 23 and December 1 and was the first Olympiad to be celebrated in the Southern Hemisphere. Despite the imperfect weather, a new track, and the November-December date, the competition was so tough that only three Helsinki champions were able to repeat as winners of track-dom's highest honor—the Olympic gold medal. All three bettered their own Olympic records in winning their title. They were Adhemer da Silva, Parry O'Brien, and Bob Richards.152

The story of the pole vault competition in the Games is one of deplorable conditions which subtracted $\frac{5}{2}$ to 10 inches from all except one vaulter's performance, and of a fabulous new pole which added inches to the performance of the one man who used it.153

Richards repeated as Olympic Champion with a vault of 14 feet $11\frac{1}{2}$ inches, a new Olympic record, to become the only man in history to win two Games' pole vault titles. Gutowski was second at 14 feet 10 $3/8$ inches; Roubanis was third at 14 feet 9 $1/8$ inches; Mattos fourth at 14 feet $3\frac{1}{4}$ inches; Lundberg, the 32 year old Swede who won the bronze medal at Helsinki, was fifth with a leap of 13 feet $11\ 3/8$ inches; and Zenon Wazny of Poland also made 13 feet $11\ 3/8$ inches to

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152Ibid.

153Track and Field News, December, 1956.
be awarded sixth place. Also clearing 13 feet 11 3/8 inches were Landström and Manfred Preussger of Germany.154

Cordner Nelson, editor of Track and Field News, tells about the introduction of the new glass pole in the Games:

At 4:50 (14'9''), each man cleared on his first attempt. Roubanis, a huge (6'3'', 185 pounds) vaulter, who, with Gutowski, was coached by Payton Jordan at Occidental and has now transferred to UCLA, was using a revolutionary glass pole. Made by a fiberglass concern in California, the dull yellow pole can be bent to a 90 degree angle without breaking and possesses tremendous snap. At 14'9'', Roubanis had raised his personal best 3 1/2 inches to within half an inch of the European record. (Reports that he cleared 15'1 1/2'' in practice are false. With the standards at that height, the bar was about 14'10''. He cleared that height but his pole knocked down the cross bar.)155

After the Games, both Gutowski and Mattos stated they would like to try the new glass pole next season.156

The year 1957 produced a new "King of Pole Vaulters." Bob Gutowski of Occidental College became the highest pole vaulter in history and erased Warmerdam's mark, not once, but twice, before the season was over.

On April 27, 1957, at Stanford University, during a dual meet between Stanford and Occidental, the crossbar in the pole vault was resting exactly 15 feet 8 1/4 inches above the ground. At 2:45 p.m., Pacific Standard Time, the 6,000 fans assembled roared the news that Gutowski had claimed the

154 Ibid.
155 Ibid.
156 Ibid.
Bert Nelson described the vault in the April, 1957 issue of his *Track and Field News*:

The long famed Warmerdam era of vaulting appeared to be a matter for history today as young Bob Gutowski fulfilled his early season promise by upping the world's pole vault best to a sky-topping 15' 8 3/4".

Working beautifully, the slim, fast Occidental wizard was well clear of the bar as he topped Dutch Warmerdam's 15-year-old standard by half an inch. Some observers, including veteran official Snort Winstead who measured Warmerdam's 15' 7 3/4" as well as this vault, insisted that Bob had a good 4" margin—and it could be, although no one will ever know...

A workmanlike vaulter, who shows no nerves—if, indeed, he has any—Bob hesitated only momentarily as he gazed at the pit, nearly 50 yards away. Then, lifting the pole off the running track to his left, he began his run. Swinging his pole around in front, this 9.9 dashman quickly, and easily, gained top speed.

An exact 5.5 seconds later, Gutowski slid the six pound pole into the box, kicked, swung, pushed and arched his beautifully coordinated body over the cross bar, 32 1/4" above his top hand. As his left hand manipulated free of the bar, he gave a last push off the black tape with his fingers of his right hand, and he was over.

A little less than two months later, at the N.C.A.A. Championships in Austin, Texas, Gutowski sailed 15 feet 9 3/4 inches to surpass anything ever done by anyone, indoors or out. He also had ten other wins of 15 feet or higher.

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157 *Track and Field News*, April, 1957.

158 Ibid.

159 *Track and Field News*, July, 1957.
Five additional vaulters cleared the 15 foot barrier that year. Don Bragg, the giant from Villinova, had seven vaults over 15 feet, with 15 feet 3 inches at Quantico, Virginia, as his top mark. Also with a top mark that year of 15 feet 3 inches was Olympic champion, Bob Richards. Bob Richards also won the National A. A. U. title with a leap of 15 feet 1 3/4 inches. The other 15 foot leapers during 1957 were Ronnie Morris of U. S. C., at 15 feet 2 1/2 inches, Joe Rose of Arizona State College, at 15 feet 1 inch, and the high school sensation from North High School, Phoenix, Arizona, 17 year old James Brewer, who shocked the track world with a 15 foot vault in his last high school meet. Brewer's coach, Vern Wolfe, at North High was an ex-vaulter himself, with a best mark of 13 feet 9 inches in 1947, while competing for U. S. C.

The remaining top performances of the year 1957 went to three Europeans. Roubanis had a best vault of 14 feet 11 3/4 inches at Athens; Manfred Preussger of Germany cleared 14 feet 10 inches at Potsdam; Vitaliy Chernobay of the U.S.S.R. leaped over 14 feet 10 inches at Odessa.

160Track and Field News, December, 1957.
161Ibid.
162Track and Field News, October, 1957.
163Track and Field News, December, 1957.
Russia felt they had an answer to America's new "Secret Weapon," Jim Brewer, in Igor Pyotrenko, a nineteen year old youth with a best height of 14 feet 5\(\frac{1}{2}\) inches.\(^{164}\) While 42 other vaulters in the world cleared 14 feet or better during the year 1957.

Highlight of the track year 1958 was the dual meet between Russia and the United States that took place at Moscow on July 27 and 28, 1958. Members of the American team were selected at the National A. A. U. Championships, held at Bakersfield, California, June 20 and 21, 1958. One of the weakest events of the A. A. U. meet that year was the pole vault, which saw only one man able to clear 14 feet 9 inches.\(^{165}\) Little Ron Morris, aided by injuries to Bob Gutowski and Don Bragg, won his first national championship.

Besides Morris, three men cleared 14 feet 6 inches in that meet. The injured Bragg gave up after one attempt at 14 feet 9 inches; Earl Poucher, former Florida vaulter, missed twice at 14 feet 9 inches, then made an odd decision to pass and attempt 15 feet, while Jim Brewer, the U. S. C. freshman and national interscholastic record holder, went over 14 feet 6 inches on his first try and won a spot on the team to Moscow.\(^{166}\)

\(^{164}\)Track and Field News, October, 1957.

\(^{165}\)Track and Field News, July, 1958.

\(^{166}\)Ibid.
The Russian pole vaulters scored an upset victory over the two American pole vaulters. According to R. L. Quercetani, the European track expert:

Neither Bulatov nor Chernobay had shown a marked competitive ability in international meet, but on this occasion the former, a 29-year-old veteran, produced a fine 4.50 (14' 9 3/4") which Morris was unable to achieve. Brewer lost third to Chernobay on the misses' count. . . . Surely, Gutowski and Bragg were badly missed.167

In that meet Morris cleared 14 feet 5 1/2 inches, Chernobay and Brewer, each 14 feet 1 1/2 inches.168

Best height in the world in 1958 belonged to the world champion, Gutowski, before he was injured, with a leap of 15 feet 4 1/2 inches at the Compton Invitationals.169

Second best vault of the year went to Morris, who, while touring Europe with the American team after the Moscow meet, sailed 15 feet 3 inches in winning a dual with Roubanis, the Greek, at Athens on August 10, 1958.170 Roubanis himself set a new record for Europeans with a leap of 15 feet 1 1/2 inches at Munich on July 12, 1958, while Landstrom, at Helsinki, on July 16, cleared 15 feet to become the second European to top the 15 foot mark.171

The other six top vaults of 1958 were turned in by

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168 Ibid.
171 Ibid.
Brewer, who set a National Freshman record with a leap of 14 feet 11 3/4 inches, Bragg with a best of 14 feet 11 1/2 inches, Preussger, who leaped 14 feet 11 1/2 inches for a new German record, and Vladimir Bulatov of U.S.S.R., also at 14 feet 11 1/2 inches, and Zenon Wazny of Poland, who set a national record for that country with a vault of 14 feet 10 1/2 inches.

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173 Track and Field News, August, 1958.
175 Track and Field News, August, 1958.
CHAPTER VIII

CONCLUSION

The purpose of this study has been to assemble in one report, a world history of the pole vault event. It is realized that in a work such as this, involving such a wide scope and period of time, that there are bound to be omissions of performances. However, it is further believed that most of the noteworthy performances of the last 84 years are noted and that all of the world records established, since the beginning of the pole vault, have been covered in this study.

It was found that the art of vaulting with a pole was familiar to the ancient Greeks, although they did not use it as an athletic event in their Olympic Games.

Vaulting was used by Guts Muths in the Eighteenth century, and by the Japanese in the early Nineteenth century. The English were the first to establish track and field competition and the first to incorporate the pole vault into those track and field meets.

Pole vaulting was first participated in officially in America in 1877 and the first great American vaulter was William Van Houten. Hugh Baxter was the first American to clear 11 feet and the first pole vaulter to introduce the hand shift was Raymond G. Clapp.
Chapter III traced the rise of the pole vault record from 12 feet to over 12 feet 10 inches and noted the introduction of the bamboo pole, a decided aid to vaulting progress.

Chapter IV took the history of the pole vault from 13 feet through the war years of World War I to 13 feet 11 3/8 inches. During this time the introduction of the fly-away form of vaulting was unveiled by Charles Hoff of Norway.

Chapter V dealt with the upward trend of the pole vault record from 14 feet, by Sabin Carr, to 14 feet 11 inches by William Sefton and Earle Meadows.

The next chapter discussed the era of the 15 foot pole vault from Warrenderam to Gutowski, and ended with the track year of 1958.

It is difficult to discuss conclusions in this work, for as we have seen, there is no end to progress in record breaking performances in track and field. Each time in history that the first man went over a new height--12 feet, 13 feet, 14 feet--many people truly believed that no one would raise the mark as much as a foot. But each time the record was moved up a foot. When Warrenderam first cleared 15 feet on April 13, 1940, many people believed that was the human ultimate, that no one would ever vault 16 feet. But eighteen years later the record has already moved up another 9 3/4 inches toward the next foot. Will not some perfect athlete
break over that "impossible" 16 foot barrier, possibly within a few years? And then 17 feet, 18 feet? Who is to say what the limit will be?
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1. BOOKS


2. ENCYCLOPAEDIAS AND ALMANACS


3. HANDBOOKS, GUIDES, AND BOOKLETS


Kane, Bob. John F. Moakley, 40 Years at Cornell. (A booklet published by Cornell University, 1940.) 48 pp.


Pierce, Don. Kansas Relays and University of Kansas Track and Field Dope Book. Published by the University of Kansas, 1958. 54 pp.


4. NEWSPAPERS

San Francisco Daily Examiner, May 7, 1888 to April 28, 1940.
Stockton Daily Evening Herald, May 7, 1880.
Pittsburg Post-Dispatch, April 22, 1935 to May 6, 1935.
The Stars and Stripes, France, May 31, 1918, and June 6, 1919.

5. MAGAZINES


6. UNPUBLISHED MATERIAL


7. MISCELLANEOUS


November 29, 1948

Mr. Earl R. Jackson
Track Coach
College of the Pacific
Stockton/Calif.

Dear Earl,

I wish to bring to your attention a very interesting, helpful piece of field equipment. Last winter, a Swedish manufacturer sent to Yale a new type Swedish steel tapered vaulting pole for experimental use. We used it all year and found it very helpful.

I list here some of its advantages over the bamboo pole:

1) It has better balance and is lighter than any bamboo pole of similar length.
2) Seven of our vaulters of different weights and heights prefer it over our bamboo poles (25) and our three aluminum poles. It supports a man of 210 lbs.
3) It has at least as much spring as the bamboo. The aluminum has no spring and is a dead heavy instrument.
4) It could last a lifetime and does not need to be boxed to send out of town. It is impervious to changes of temperature.
5) In past years, when our men used bamboos, each man had his favorite and when this cracked, the athlete suffered a psychological loss of confidence to say nothing of the accident hazard of a patched pole.
6) All our opponents used it and discarded their own poles to use ours in competition. Many of them reached new heights.

Because of this tremendous enthusiasm, we have tried to purchase several more. Contact with the Swedish firm brings out the fact that it is not feasible for them to ship less than 100 at a time and they have asked me to estimate if enough colleges and high schools could use them. They can be sent over in January.
They are expensive and cost $35.00 each, f.o.b. New York. However, we believe that you would find them economical in the long run. Annually we spend from eighty to a hundred dollars on bamboos and they have always been a headache. We feel that three Swedish steel poles would solve our problem permanently. Many schools need only one.

I am collecting the orders and if you wish any, would you please send me immediately your Purchase Order made out to Beconta Inc.

P.S. If it is convenient a check with the Purchase Order would facilitate the details of delivery.

Cordially,

Signed:

Bob
Robert Giegengack
Track Coach
Dear Mr. Kring;

Thank you very much for your letter, dated July 24th, 1958. It is good to hear that you have moved to a new school where you are enjoying yourself so much. Over on this side, we are going to have American track team here during the month of August, an event which should keep us busy.

Now in regards to your main question, it seems that bamboo pole vaulting has been used in Japan for quite a while. We find a pole vaulting in an old painting (dated around 1860's) and bamboo pole is used there. A rope is used instead of wooden bar.

In 1873, an Englishman came to Japan and introduced track and field, and it has been said that in a field day held at the Naval Academy (then in Tokyo) in 1874, pole vault was included in the day's program.

In 1878, pole vault was included in the field day of Agricultural School at Hokkaido, and the record says that 9 ft 9 in was cleared. Now this was due to the coaching of Colonel Clark, the founder of the school.

In 1883, pole vault was done in the field day of Tokyo University but no record was kept. This was under the coaching of an American Stranger.

In those days, a rope with sandbags attached to its both ends was used instead of wooden bar. Also the athlete climbed the pole.

This style remained till around 1910's.

In 1902, Minoru Fujii of Tokyo University cleared 10 feet 7/8 in, 1903 10 ft 2 in, 1904 10 ft 8 in, 1905 12 ft, and in 1906 12 ft 9 3/4 in. This last record supposed to have exceeded the world record of that time, and the Almanac published by Spalding was said to have recorded it.

The first formal track meet in Japan, following the international rules, was held in 1911, and this was to select athletes to be sent over to 1912's Olympic Pole vault record then was 8 ft 9 1/2 in.

In 1920 10 ft 1/8 in, 1922 10 ft 11 in, 1925 11 ft 11 1/2 in, 1928 12 ft 11 in, and from 1929 on Nishida lifted the record
above 13 ft and he cleared 14 ft 1 in in 1932. Present Japanese record of 14 ft 3 3/8 in was made by Ooye in 1937.

It is quite certain that wooden pole also has been used in Japan, and Mr. Asano, the chairman of Japanese Track & Field Association has a recollection of using it in around 1920's but we have no definite record on this matter.

Wishing you a good season to come

Sincerely yours,

Mikio Oda.
Dear Mr. Kring:

I was glad to read your letter that you were contemplating working on "A Historical Study of the Development of the Pole Vault" for your Masters Degree at the College of the Pacific.

I am sorry I can't answer some of your questions because I never did any research on the history of pole vaulting. I started studying the technique of pole vaulting in 1896 and pole vaulting was an athletic event long before that so I can't answer "when did the first pole vaulting competition take place in the U.S.?

All the early poles used in pole vaulting were made of hickory, ash or cedar; in fact my first pole was cedar. It is possible you might get that information from A. G. Spaulding & Bros. Of course, they were very much heavier than the bamboo pole. You ask "how was it constructed?" The cedar pole that I used was just taken from a cedar fence and worked down to size by draw shave. How the ash and hickory poles were manufactured I do not know definitely, but I understand some of them were actually turned on a lathe. Spaulding was the largest supplier and they might give you some information on this. Some of these poles I know were hand made.

In 1905, in my sophomore year, there were stories that the Japanese used a bamboo pole. Walter Dray and myself secured some bamboo and we started trying them out. Walter Dray didn't like them and I stuck with it and I improved so fast that all Yale pole vaulters started using bamboo in the inter-collegiate games in 1908. Walter Dray, Frank Nelson, Charlie Campbell and myself, with bamboo poles, won all the points in the pole vault. Those games were held at Philadelphia in 1908 although we had been practicing with the bamboo pole two years before that. A protest was lodged against the use of them in those games but was not sustained and when I left with the
American Olympic team I brought back from Paris a lot of bamboo and I started the Yale Bamboo Pole Vaulting Company, my first business venture and I sold a great many bamboo poles all over the United States. They then became universal in use until the aluminum pole came into existence. There is no question that it was an improvement in the technique because you could naturally run faster with a lighter pole and you could also handle it much better in making the shift, etc.

When I first pole vaulted back in Moscow, Idaho with the university boys there, they all used spikes in the pole. No hole was used at that time to the best of my knowledge. Various types of spikes were used - some were turned out of aluminum, some were cast. Some even used, like myself, a large spike that I drove into the pole and then cut the head off.

I haven't got the exact date, but I think there is considerable question in my mind who used the hole first. I know we started using it at Pacific University in 1900. We found out later they were using a hole in California and they may have used it in the East. I haven't done any research on that so I can't give you the exact information, but that is approximately the date.

I think I was Chairman of the Track and Field Committee of the A.A.U., I know I represented them at the International Federation meeting when the box was adopted officially, although I know in California and I know in Yale we used it long before it was officially adopted. They didn't adopt the one we tried to get adopted, but it was approximately the same. The date it was officially adopted you can get from Dan Ferris of the A.A.U. I am sure it is in their records because I represented the A.A.U. at that meeting, I think at Amsterdam. I was manager of that Olympic team. The dirt holes, none of them were alike, and there was always an argument how deep you should dig them - that's why the box was adopted.

One question you didn't ask was when the slide was first used. Hugh H. Baxter was the last world's champion to vault with his hands wide apart; i.e., the pole vault up to that time was more or less of a jumping event. I think he was the highest vaulter with his hands wide apart. Then followed R. G. Clapp of Yale. This date you can get from the record book. He was the first one to my knowledge to use a slide; i.e., he would slide his left hand up the pole which my physics machine shows was a great advantage. This certainly was a very important technical achievement. A great many other technical advantages were discovered, but that would require the writing
of a book such as the inside shift, carrying the pole straight down the runway, then you would have to get into all the reasons and advantages of it because there has been much discussion and debate. Many vaulters today don't use what I consider the most valuable technical points.

With the machine that I designed for working out the physics of pole vaulting it proved conclusively that the tall man had an advantage. Prior to 1908 all the pole vaulters were short men, the majority of them, but we were convinced that the tall man had the distinct advantage but it took him a little longer to learn the technique than the short man. Some short men have done remarkably well, but all your world's champions are men nearly 6 ft. or better.

I think you will get an awful lot of good information from Warmerdam. He is a bright fellow and he uses the same technique that we have been using here at Yale for many years, although he learned it the hard way, himself.

I am glad you mentioned Mr. Stagg. I am a great admirer of his, naturally, and I accompanied him when I was manager of one of the Olympic teams going to Europe and I got to know him very well. Although he wasn't at Pacific University at the time I attended, I learned a great deal about him. He is a very wonderful man.

I am sorry I can't go back into the historical date, it was before my time. I am very happy to answer to the best of my ability the questions you have asked.

Cordially yours,

Signed:
A.C. Gilbert

ACG:AM