Tell one important fact about Walter Camp.

If your answer is that he invented All-American teams, go to the foot of the class.

All-American football teams have produced inumerable friendly arguments among fans and more than a smidgin of honor for the designees, but Camp's annual selections -- though they became the most respected -- were one of his lesser contributions to American sport. As a matter of fact, he didn't invent the idea of All-American teams at all.

Instead, he invented American football.

A Natural

Walter Camp was born April 17, 1859, in the city of New Haven, Connecticut, the son of Leverett L. and Ellen Cornwell Camp. He attended Hopkins Grammar School in New Haven, entered Yale in the Centennial Year of 1876 and was graduated in 1880. For two more years, he continued at Yale as a graduate student in the Medical School, finally giving that up to enter the world of business. He joined the sales force of the New Haven Clock Company and worked successfully through the positions of Assistant Treasurer, Treasurer, General Manager, President, and finally Chairman of the Board. He matched his business success with leadership and generosity in New Haven civic and charitable enterprises. Respected and honored by all, he died peacefully in his sleep on March 14, 1925.

However, neither his stewardship of a well-known clock company nor his New-Haven civic-mindedness could have occasioned the outpouring of national mourning that marked his passing. The recognition of loss came in recognition of his accomplishments in football.

Young Camp was a natural athlete, perhaps the best in the history of Hopkins Grammar School, excelling at track and water sports. In baseball, he starred as a pitcher, reportedly being the first of his mates to master the intricacies of delivering curveballs. When the weather turned cool, New England youth played variations of soccer. Again, Camp stood out.

When he matriculated to his hometown college of Yale, he naturally went out for the football team.

His timing was exquisite.

The Football Bandwagon

In the fall of 1876, Yale was in the throes of learning a new game. The beating they'd been handed by Harvard the year before still smarted, and the Elis were determined to see it didn't happen again. No more halfway, concessionary rules! Yale planned on playing straight rugby and knocking the hell out of Harvard.

Rugby was the new deal at Princeton, too. In fact, the Tigers had much to do with the nearly overnight conversion to rugby all across New England. W. Earle Dodge and Jotham Potter, the pair of Princetonians who watched Harvard lick Yale in 1875, had succeeded in selling the rugby game to their own campus, a feat only slightly inferior to selling refrigerators to Eskimos. As Princeton went, so should everybody else, figured Messrs. Dodge and Potter. They fired off invitations to Harvard, Yale, and Columbia, inviting them to Springfield, Massachusetts, so they could all sit down and decide to play the game the way Princeton wanted to.

Yale and Harvard, already hearts and souls for rugby, were easy. Columbia came, having won more games than they lost in 1875 -- a rare feat for the Lions during the next century. On November 23, 1876, with the season far along, each school sent two representatives to the Massasoit House in Springfield: H.C. Leeds and C.S. Eaton from Harvard, E.W. Price and C.D. Brewer from Columbia, Eugene V. Baker and J.B. Atwater from Yale, and, of course, Dodge and Potter from Princeton. Yale lobbied for eleven men on a side -- the complement they'd learned from Eton in 1873 -- but, generally, everyone was in agreement. They adopted nearly verbatim the Rugby Union Code used in England.

The only serious bone of contention involved touchdowns. Columbia and Yale objected to counting them in the score, preferring the Rugby Union Rule: "A match shall be decided by the majority of goals alone." However, Princeton thought touchdowns ought to count, and Harvard was adamant about it.

They had good reason to be. Only five days before the Massasoit House Meeting, the Crimson played their second game against Yale. Before the game, Harvard bowed to Eugene Baker's request to play only eleven men on a side and to ignore touchdowns in the scoring. Sure enough, Harvard pushed over three touchdowns but missed all the following goal attempts. Yale made a single successful kick to win the game, 1-0.

After a loss they considered undeserved, Harvard was not about to throw touchdowns to the wind. Finally, a compromise was worked out. The adopted rule read: "A match shall be decided by a majority of touchdowns. A goal shall be equal to four touchdowns, but in the case of a tie, a goal kicked from a touchdown shall take precedence over four touchdowns."
Princeton, Harvard, and Columbia formed what they called the Intercollegiate Football Association at the meeting. Yale held out for a couple of years so they could make private agreements with individual opponents to play only eleven men, ignore touchdowns, or do whatever they thought might help. By 1879, that had become more trouble than it was worth, and they joined the I.F.A.

Camp at Yale
Princeton clearly had the dominant team during the 1870's. Historian Parke H. Davis accorded them the "National Football Championship" or a share thereof every year but 1871 (when no games were played) and 1876. Of course, with only a half dozen schools playing any brand of football, the national championship took on considerably less lustre than it does today. Nonetheless, the Tigers' 23-3-2 record from 1869 through 1879 was impressive.

In a 1904 issue of The Independent, Walter Camp -- from the perspective of a former Yale halfback -- listed the following "leading players of the game" for the period 1876-1879:

**Forwards** - J.S. Harding, Yale; John Moorehead, Yale; Bland Ballard, Princeton; J.E. Cowdin, Harvard

**Halfbacks** - W.D. Hatch, Yale; Oliver D. Thompson, Yale; W. Earl Dodge, Princeton; Theodore M. McNair, Princeton; R. Winsor, Harvard

**Backs** - Eugene V. Baker, Yale; Robert Bacon, Harvard

Oliver Thompson and John Moorehead, both from the Pittsburgh area, would later be instrumental in creating professional football. With admirable modesty, Camp did not include himself among the leading players, although, by many accounts, he was the best of the lot.

Writing in the 1925 Football Guide, his friend and admirer, Parke H. Davis, recounted Camp's career at Yale:

When he entered Yale in 1876 he instantly became one of the best all-around athletes in the university. In his undergraduate days he made every varsity team that existed in that period. He was pitcher and captain of the nine. He was halfback and captain of the eleven. He ran the hurdles and is credited at Yale with having invented the present hurdle step. In swimming he repeatedly won races from short distances up to five miles. In the rising game of tennis he was a leader. He rowed upon his class crew ....

In 1876, when Captain Eugene V. Baker called for candidates for the Yale rugby team, freshman Camp was right there. Within a day or so, young Walter won the a regular halfback position. He was exceptionally fast and extraordinarily strong, but, more important for a rugby player, he was a terrific kicker, excelling at both punting and dropkicking. No doubt, he'd have been a star had he been a complete dodo (although he might have had trouble staying in Yale). However, when contemporaries spoke of Camp's outstanding abilities, the first thing always mentioned was his mind. Remember, the game of rugby was still new at Yale. New problems arose virtually every time the team went on the field whether in a game or practice. Camp always credited Eugene Baker with teaching him more about the game than anyone else, but it's obvious from the remembrances of teammates that Baker very soon treated Camp as an equal. In Davis words, Camp was "resourceful, courageous, thinking continually in terms of football, swiftly solving new situations, and indomitable."

Despite his great abilities, Davis maintained that Camp was unlucky as a player, detailing several "breaks" that went against him. Although the stories told by Davis lose much of their tragic quality to a modern reader, they are worth recounting if only to show how the game was played in Camp's day:

No player in the history of the game contended against greater misfortune in his scoring plays than Walter Camp. Four times in his career he actually accomplished scoring plays only to have them nullified. The first of these catastrophes occurred in the Princeton-Yale game of 1877.

In the preliminaries to the game, Captain Eugene V. Baker of Yale exacted the special rule that touchdowns should not count at all in determining the score, but that the latter should be based upon goals alone. As the playing eventuated, Walter Camp, in the first half, catching a long, sailing punt, dashed 80 yards up the field through the entire Princeton team and made a touchdown. In the second half, getting the ball out of "scrum", Camp again dashed up the field, fifty yards. As he was crossing Princeton's line, he was suddenly tackled by McNair, Minor, and Clarke thrown in, but, rising to his feet, he shook off his tacklers and by the great strength that was his forced his way over the line for a second touchdown. In both instances the try was missed. No score by either side occurred and the game technically thus ended in a draw, 0-0.

His third misfortune came in the Harvard-Yale game of 1878. It is near the end of the first half. Wetherbee of Harvard has carried the ball almost to the Yale goal line, where it is lost. Watson and Camp of Yale, alternately carrying the ball, sweep down the field. Finally Camp bursts away and carries the ball to a point thirty-five yards from Harvard's goal line. Here, as he was about to be tackled, he suddenly stops in his flight, drops the ball, and, with a drop kick, lifts it high in the air.

The ball spins down its groove directly towards Harvard's goal. While it is in the air the whistle sounds the end of the half. The ball continues accurately on its way and cleaves the posts high above the cross-bar. The rule in that period, however, terminated the half the instant the whistle sounded, and thus this brilliant goal was nullified.

The fourth of these curious coincidences came in the Harvard-Yale contest of 1879. Again it was the closing moments of the first half. The ball is directly in front of Harvard's goal, but forty-five long and difficult yards away. Camp gets the ball out of "scrum" and essays to conquer the long distance by a goal from the field. He drops the ball, lifts it with a powerful kick, and the ball, spinning and tumbling, covers the long flight and crosses squarely between the posts. The referee, Bland Ballard of Princeton, however, has detected holding, and so the beautiful goal which would have won an otherwise scoreless game went for naught.

Eligibility requirements were different in Camp's day from today's four year maximum, or, to be precise, there were no eligibility
requirements at all except a generally accepted idea that a school's player should in some way be connected with the school. By 1880, Camp had graduated, but he continued his studies in the Yale Medical School, and so he also continued at his regular halfback slot on the rugby team in both '80 and '81. It was in '80 during the Yale-Harvard game that he made another big scoring play and this time it counted. With less than five minutes to play, he sent a 35-yard placekick through Harvard's goal posts for the first score of the game to lead a sensational Yale win.

Camp Invents Football

From 1876 through 1879, the game was rugby, with only a few minor American embellishments. But rugby was merely a transplanted English game, hardly a pastime to gain widespread popularity in a young nation just celebrating its centennial and beginning to view itself as superior to its European origins. In addition to American chauvinism, rugby suffered from a couple of other maladies. Arguments continued over the proper number of players and the scoring system.

Most critical, rugby allowed little room for planning or tactics. The constant flux of the scrum, in which the ball was dropped between the teams to be scrambled for, meant a player never knew from moment to moment whether he would be trying to score a goal or prevent one. American folk hero Davey Crockett had lived by the motto "Be sure you're right; then go ahead." The rugby player had to "go ahead and then find out if you're right."

But during the next four years (1880-1883), all this would change. Under the leadership of Walter Camp, English rugby became American football.

Parke Davis explained:

Great as he was as a player, he was still greater as an architect of the American intercollegiate game. Sitting as Yale's representative specifically, but of intercollegiate and interscholastic America generally, in every session of football's legislature from 1878 to 1925, it was his resourceful mind that conceived and constructed the majority of the basic changes which made (it) a distinctly American game.

He was still a junior at Yale when he began his long and brilliant career. He appeared in the game's second "convention", as the legislative assemblages of Columbia, Harvard, Princeton and Yale were called, held in the old Massasoit House in Springfield, October 9, 1878. He promptly and aggressively took a position of leadership by moving to abolish the Rugby institution of fifteen players upon a side and to substitute therefor the number of eleven. This proposition the convention rejected. With the persistency that ever is one of the marks of genius, in 1879 he renewed the motion, but again it was rejected. In the latter convention he set in motion his second reform, which was to count safeties as scoring plays, but adversely to the side that made them. This suggestion also at the time was rejected.

At the next intercollegiate football convention, convened at Springfield October 12, 1880, Camp came loaded for bear. The representatives at this historic meeting were W.H. Manning and T.C. Thacher of Harvard, Edward Peace and Francis Loney of Princeton, and Camp, Robert H. Watson and W.B. Hill of Yale.

For starters, Camp renewed his motion to reduce the number of players on a side from fifteen to eleven, and this time the motion prevailed. Yale finally had its eleven-man sides, perhaps because they had an extra man at the meeting. Parke Davis gave Camp credit for "inventing" the idea of playing eleven men on a side, but that's a bit strong. Yale had been lobbying for that number since before Camp started in school. But to give him his due, he pushed the idea through after years of Yale frustration.

The change was important -- obviously, football is a more open game with twenty-two men running around than it would be with a full thirty out there clogging things up -- but compared to the next ace Camp had up his sleeve, the reduction of four players per side was only cosmetic.

For several years, Camp had been studying the possibilities of rugby, and his dissatisfaction had increased. The rugby "scrum" gave neither side an orderly possession of the ball nor the right to put it in play and to execute the ensuing maneuver with much more than a helter-skelter strategy. That sort of messiness was foreign to Camp's whole way of thinking. Certainly Camp wasn't the only one to see the vast improvement which could be obtained by establishing a method of putting the ball in play which would give to one side its undisturbed possession, thereby permitting a strategic and tactical preparation to advance it. But he was the one who figured out how to bring it off.

He had personally penned the following revolutionary change in the rules: "A scrimmage takes place when the holder of the ball puts it on the ground before him and puts it in play while on-side either by kicking the ball or by snapping it back with his foot. The man who first receives the ball from the snap-back shall be called the quarter-back and shall not rush forward with the ball under penalty of foul." In one brilliant move, he'd created the "scrimmage" and the "quarter-back," creating a way for one side to hold possession of the ball and a way to put the ball in play.

When this proposition was accepted unanimously, American football began.

However, it would take a couple of more "Camp-isms" to make it work. The game was in limbo, at this point. It wasn't rugby anymore, but it wasn't quite American football either. Several adjustments had to be made.

The practice of snapping the ball back with the foot proved awkward and somewhat erratic. At first, some centers used the practice of "inch-kicking", wherein they would nudge the ball a short distance backward, then pick it up and hand it to the quarterback waiting a few yards behind. In 1889, Bert Hanson, the Yale center, bent over and bounced the ball back between his legs. Five years later, Amos Alonzo Stagg as coach of Chicago University invented the modern lift-up pass by moving the quarterback to a standup position further forward and having him take a direct transfer of the ball from the center.

Camp's innovative scrimmage immediately sent strategists to the drawing board. The question was how to disperse the eleven men on defense. Harvard came up with a formation having seven men on the line, one fullback, and three halfbacks, who alternated at
quarterback. Princeton preferred six men on the line, one quarterback, two halfbacks, and two fullbacks. At Yale, Captain Camp came up with the definitive formation: seven on the line, the quarterback a few yards behind the center, the halfbacks further back and spread to either side, and the fullback set deep behind the quarterback. In other words, he created the T-formation.

The names of the positions originated with the reduction to eleven players. The players at the extreme end of the line had been called "end men" all along, and this naturally evolved to "ends". The player at the middle of the line was called, with equal wit, the "center." The players on the center's left and right were at first called the "next-to-centers", but because they guarded the center during the snap back they eventually became "guards". Meanwhile, it was noted that the horribly-named "next-to-ends" made more tackles than anyone else. The next step was predictable.

However, the scrimmage was not an unmixed blessing, at least by itself. As a matter of fact, it dangled near ruined football.

Camp assumed that the ball would continue to change hands at a fairly rapid clip, that teams would run a few downs and then punt. Up until then, they'd kicked whenever the scrum gave a poor field position. Why should strategy change with a scrimmage?

Princeton showed him why.

The Tiger braintrust of Edward S. Peace, John S. Harlan, and P.T. Bryan very quickly realized that -- should a team want to -- it could sit on the ball until the cows came home and never let its opponent have a chance to score. And, Princeton found several times when it wanted to. For example, when they got ahead in a game. Or, if they played someone who figured to beat them. Such a situation came up in the Princeton-Yale game of 1881. Yale was undefeated and probably the better team, but Princeton was also undefeated and wanted to stay that way. To that end, the Tigers spent the first half fiddling around, gaining no yardage, but holding onto that football while Yale and the spectators who paid good money to watch got angrier and angrier. Came the second half, and Yale under Captain Camp decided they'd best not risk a miscalculation. THEY sat on the ball while Princeton got angry and the spectators' considered jockacide. What became known as the "block game" had to be the most unpopular football game ever held.

After that travesty, something drastic was necessary. Some called for junking the whole scrimmage idea and going back to rugby, but again, it was Camp to the rescue with another new rule: "If on three consecutive fairs and downs a team shall not have advanced the ball five yards, nor lost ten, they must give up the ball to opponents at the spot of the fourth down."

This, in its original form, was the famous "yards to go" rule. Naturally, with all the measuring involved, they decided to line the field off in five-yard segments, and pretty soon somebody with a good eye remarked, "By gum! It looks just like a gridiron!"

From the day this rule was accepted -- October 12, 1882 -- we can say that the game became American football. Scoring was still a little strange to modern fans; in the 1882 version, it took four touchdowns to top one goal kicked from the field and two safeties equalled one touchdown. Confusing though that may sound, it worked all right most of the time. But there were exceptions.

In the Harvard-Princeton game of 1882, Harvard scored a touchdown, missed the goal but later kicked a goal from the field. Meanwhile, Princeton scored a touchdown and successfully negotiated the goal after. The referee, a Yale man, awarded the win to Harvard. Princeton, claiming the rules did not justify that, refused to accept the ref's verdict and claimed a victory for years afterward.

In order to avoid such messes in the future, Walter Camp came through with another ace. At the Convention of October 17, 1883, he introduced the point system of scoring and it was quickly adopted. The original values were one point for a safety, two for a touchdown, four for a successful goal after a touchdown, and five for a goal from the field.

The idea was right, but the mix was wrong. Two months later, at another meeting, the values were changed:

- Touchdown = 4 points
- Safety = 2 points
- Goal following a touchdown = 2 points
- The goal from the field (or, as we would say, a field goal) remained at five points.

These values proved quite workable and were retained until 1897, the only addition being an 1885 codicil which awarded two points to the offended side in the event of intentional off-side and slugging the referee.

Had Walter Camp turned his back on the game after 1883, his place as "Father of American Football" would have been secure. But, as a matter of fact, he remained American football's most respected authority and prime mover for over forty more years.

In his 1925 memorial to Camp, Parke Davis rhapsodized:

"It has been said that it is as glorious to have written a country's songs as to have fought a country's wars or to have formulated a country's laws. Walter Camp performed an equally large and useful public service by establishing the amateur sports of the country upon a sound and wholesome basis. As the leader of Yale in the years when Yale was the leader of the colleges of the country Walter Camp stood forth so vividly and so correctly for the best in intercollegiate sport that he deeply impressed his ideals upon the outdoor games of the country. His standard, full high advanced, was ever the standard of honor, nobleness and manliness."

Several other important rule changes were made during the 1880's. In 1881, the size of the field was reduced from a monstrous 140 yards long by 70 yards wide to a more playable 110 yards by 53 1/3 yards. Goal posts were specified as exceeding 20 feet.

The length of a game had been set in 1887 at two halves of 45 minutes each with a fifteen minute intermission. Through the '80's, various codicils allowed for ending the game because of darkness (1882), taking time out for all necessary delays (1883), limiting..."
delays to no longer than five minutes (1885), and taking time out after scoring plays (1889).

After several interesting small changes concerning officials, including the dictum that the referee "shall be paid", the "crew" was settled at one referee and one umpire in 1887. In 1889, they were empowered to use whistles to indicate cessation of play and the referee was given a stopwatch.

Things were shaping up. The most important rule change of the latter 1880's seemed like a minor addition at the time. In 1888, at the urging of Camp, tackling below the waist was made legal. According to Parke Davis: "It apparently was only a slight change in the rule, but a slight change in the rule can make a profound alteration in the practice of play. Against the sure and deadly low tackle the best backs no longer could gain consistently in an open field. To meet this reinforcement of the defense, the offensive line of scrimmage was contracted until the players stood shoulder to shoulder .... The backs were drawn in and also stationed close to the line. Open field running disappeared and in its place came heavy interference, line bucks and plunges, boxed on the tackle, flying wedges, turtle backs, mass play, momentum plays, flying interference, revolving wedges, tandems, guards back, tackle tandems and the scores of other ingenious attacks which characterized football from 1888 to 1895."

In effect, the legalization of the low tackle, along with the rule that linemen could not extend their arms, eliminated the last vestiges of rugby. The game that was played for the next several years would appeal to very few modern fans. It was grunt, groan, brute force, and a cloud of dust -- but it was definitely American.

The Americanization of football helped spread its popularity through the 1880's, as more and more schools gave it the old college try. By the 1890's football fever was raising temperatures on nearly every campus in the nation. Outstanding players were receiving accolades, and by 1892, some were receiving pay.

The egg was ready to hatch.