

In the World of Sport

BRAINS, NOT BRAUN, GREATEST ASSET IN FOOTBALL TO-DAY

What part does brute strength play in modern football?

Is brain and speed more essential than brawn in the open play that now features the grid game?

When a coach looks over his available material, what style-player has the most appeal?

The good old game of football has changed much in the last ten years. The successful coach must adapt himself to existing conditions. A coaching system that was successful ten years back would be an absolute failure to-day.

There was a time when football games were won by brute strength and awkwardness, but to-day we can't find a place on a successful

team for the man with a million-dollar body and a ten-cent head.

My experience has proved conclusively to me that this scientific game of football is still in the embryonic stage, therefore it is imperative that we choose the most active and intelligent men for our team.

Each season we are introducing new modes of attack, and our field general is constantly changing his defense in order to successfully cope with these strong offensive experiments.

The general conception of a quarterback is one who directs the attack, but to-day both the defense and offense is directed by the wise field general.

It has been my pleasure to act as field general for Center College during the past four years. It was necessary to change our style of play for each game.

From my experience at Cambridge in 1920, it was evident that our success in 1921 depended upon the ability of our field general to instantly diagnose each Harvard formation and meet it with the proper defense. As I backed up the line I was in a position to direct my line-men.

I have always tried to direct an offense which would require the least bit of energy, because when we shift to the defense we want our backs and ends to have plenty of speed to come in fast on opponents' offense.

In the Tulane, Auburn and Washington & Lee games last year, our secondary defense always came in exceptionally fast, and never allowed our opponents to gain around the ends or by forward passes.

Our team was criticized by a number of sport writers for getting our plays off so slowly. Especially was this noticeable in the Harvard game. Center had a reason for using such methods.

On our close formations I would call a series which would indicate the point of attack. We would then try to widen the hole in the defense by calling short series of signals and shifting to and fro to pull the defense over. Just as soon as the hole was assured the snapping signal was called and our backs were through the hole like a streak.

Yes, it takes a smart team to play that kind of football, but as I said before, 75 per cent. of the game of football is played above the shoulders.

Lipton To Give Cup. Sir Thomas Lipton has agreed to give a cup to the winner of the fishermen's races, next August, as a feature of Gloucester's 300th anniversary celebration. A letter to this effect was received today by Fred W. Tibbets, chairman of the Celebration Committee. The famous yachtsman, who wrote from Chicago, has also informed the committee that he will come there to present the cup in person. The races will be open to all genuine fishing vessels, and will be "without fuss or frill," the committee announced.

Galt Terriers Play to 80,000. As evidence of the grant hold amateur ball has on Western Ontario, records show that the Galt team played to 80,000 people in 40 games, and 47,000 at their home games. The Terriers won their spurs on foreign ground, beating St. Thomas in Brantford, Guelph in Kitchener, and Belleville in Guelph, establishing attendance records for the parks of the former two cities, which were represented in the Michigan-Ontario League.

Join Ontario Baseball League. At a banquet recently given in Brockville for the Baseball club and executive of the League, it was the opinion of a number present that next season the Eastern Ontario Amateur Baseball League of which E. A. Cook, Prescott, is president, should become affiliated with the Ontario Baseball League in order that the winners may have an opportunity of trying their skill against the clubs in the western part of the province.

Tubman is Ill. The "jinx" that has haunted the Ottawa Big Four football squad from the start of the present season is still strongly in evidence. Joe Tubman, the stocky young kicking half of the Senators, has been ordered to bed, suffering from tonsillitis, and his physician reports that he will be unable to resume his football activities this autumn. The squad which has never been too strong at any stage of the schedule, is thus left without a single player who can even remotely hold his own with any of the kicking stars of the senior union.

Owner and Horse Ruled Off. Steve O'Boy, a pacer, his owner, H. G. Cheney, of Sabina, Ohio, and his driver, Charley Slight, were ruled off harness horse race tracks for life, by officials of the Cranwood track, Cleveland. Judges Joseph McGraw and R. G. Millman ruled that the men had attempted to "fix" the 2:16 pace.

The left and right field fences in the American league park in Chicago are 362 feet from home plate; the fences in the National league park are 343 and 208 feet distant respectively.

VARSIITY OUTGENERALLED.

By the Snappy Queen's Team Under Red McKelvey.

Ottawa Journal. Queen's stepped onto the field the personification of speed and confidence. On the wing line the players were snappy, too, and were of a less bulky type than U. of T. Even in the preliminary workout the big difference in teams was apparent, for the Blue and White appeared just a little too confident, while Queen's entered the fray with the "everything to win and nothing to lose" spirit.

University of Toronto was outgeneralized. Following the McGill victory much prominence had been given "T's" open-field attack, yet in Saturday's contest it was conspicuous by its absence.

Queen's defence on the wing-line was weakened to bolster up the ends. Only two men—the inside wings—were within a yard of the line of scrimmage, while the middles played two yards back with the second line of defence. "T's" never failed to get in a few yards through this formation, but sooner or later they were called for interfering past the three-yard limit.

With the added strength thus given to the Queen's ends on defence, the U. of T. attempts to get into the open field were smothered in the majority of cases before they got under way. Then, too, mediocre handling of the ball on these plays helped the Queen's cause. "T's" made ten fumbles throughout the game, almost three-quarters of these coming from scrimmage formation and only three of these were recovered. Queen's made eight fumbles, but recovered the ball on five occasions. That tells a tale in itself.

"Evans-to-Batstone-to-Leadley-to-Harding" is a slogan that will ring in the ears of Queen's supporters as synonymous of their great victory after years spent in knocking at the door. The quadruple passing play time and again sent Harding or Leadley shooting around the ends for long gains. The work of the backfield was spectacular and brilliant, and it was this combination, in the main, that offset U. of T's superiority in line plunging. Evans got the ball out fast and passed to Batstone, who made the play for the other two backs. Queen's had plenty of snap in their formation plays, and several times they caught the Blue and White napping, when the play was started without a signal, and the backs swept out into the open.

A. Swenke has purchased Minuto Man from S. Louis, and the two-year-old, Belphrizonia, from R. McKeener.

A. V. Thomas has purchased from R. T. Wilson, Jr., the horse Vendor.

J. K. L. Ross will send a division of his stable to Tijuana this winter, in charge of H. McDaniel, Jockeys Claver and P. Walls will accompany the string, consisting of Mattikins, Hildur, Baby Grand, Messines, Spanish Maize, Feylance, Basille, Lion d'Or, and a number of yearlings billed for early two-year-old racing.

H. J. Thompson, trainer for E. R. Bradley, was stricken with paralysis Monday at Baltimore.

A. B. Dade will do the starting at Jefferson Park, New Orleans, this winter.

George Strate, for many years superintendent of John H. Rosseter's famous Wikink Ranch, California, has resigned.

Trainer Eugene Wayland has entered Exterminator in the Thanksgiving Day Handicap at Bowie this fall.

Dempsey's Plans Hinge on Actions of Siki. Jack Dempsey and his manager, Jack Kearns, had made their plans to invade Europe the first of the coming year until Kearns read in the Chicago newspapers that Siki, the battling Senegalese, was coming to America. Now the Dempsey trip is in doubt.

Kearns has received an offer from a syndicate of London business men for Dempsey to meet the winner of the Joe Beckett-Siki fight in London on December 7th. There were also offers of theatrical engagements for Dempsey in Europe. Dempsey's trip abroad still is on if Siki is beaten by Beckett in which case Dempsey will meet Beckett, Kearns said. If Siki wins and comes to America, Dempsey's trip probably will be cancelled, Kearns said. Dempsey will join Kearns here on Thursday.

CHICAGO BOAT WILL ENTER IN NEXT SEASON'S RACES. Chicago is to be represented in the next international six-metre yacht race. Commodore Sheldon Clark, of the Chicago Yacht Club, is forming a syndicate to build a six-metre yacht which will be entered in the famous Long Island Sound race between the British and American vessels.

The Chicago boat will be manned by fresh-water sailors and sent through to New York to meet the pick of the famous fleet of six-metre racers which beat the British in September and against the pick of the British sailors who man the challengers.

Asplund, of Swarthmore, had the best punting average for a game last year. Man o' War never ran in the Kentucky Derby.

RADIO DEVELOPMENT

BY LIEUT. JOHN R. IRWIN
U S AIR SERVICE (RESERVE)

MULTIPOLE MAGNETS.

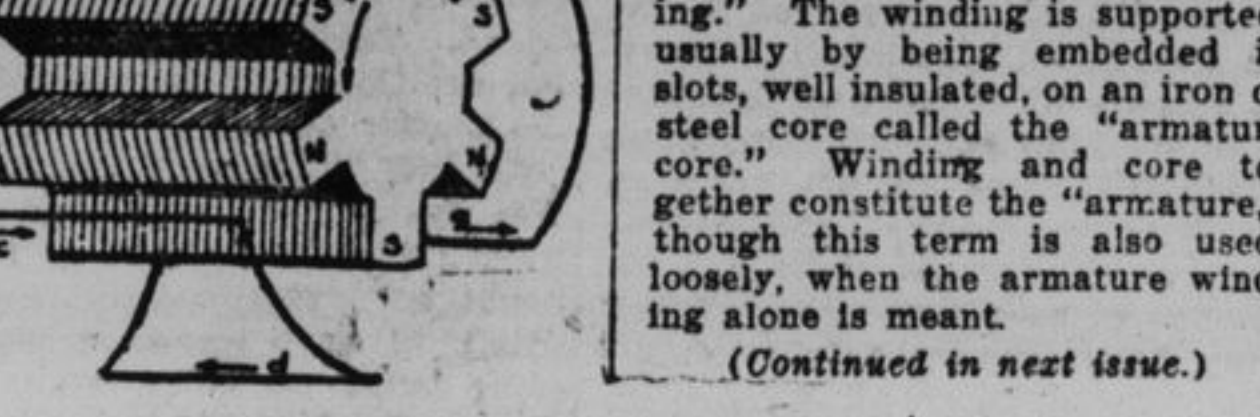
To produce a frequency of 60 cycles per second by the use of a single magnet with two poles requires a speed of rotation of 60 cycles per second. Such a speed is not practicable for large machines. To get 500 cycles would require 500 revolutions per second, or 30,000 revolutions per minute. By arranging a number of similar north and south poles alternately, as in Fig. 1, and providing corresponding conductors, a lower speed of rotation may be used. As in Fig. 1 of the preceding article, the magnet is supposed to be made to rotate, while the conductors A, B, C, D, E and F remain stationary.

When the upper north pole is coming toward the reader, electromotive forces will be induced in the several conductors in the direction of the arrows. The conductors are all connected in series, except between F and A, where connection is made to an external part of the circuit, X. All are in the same relative position to the several magnetic poles; their electromotive forces are equal, and in the case shown, the total is six times as great as the electromotive forces in any one conductor. For every revolution of the magnet, each conductor is passed three times by an N and three times by an S pole. Each pair of poles gives rise to a cycle, so for each revolution there are three cycles of emf. in the conductors. Thus, for a given speed, the frequency is three times as high as it would be if there were but one pair of poles.

The magnets (NS in Fig. 1) which produce the magnetic field of an alternator are called the "field magnets." If there is but one north and south pole, the machine is said to be "bipolar." If there are several pairs of poles the machine is "multipolar."

The conductors in which the electromotive forces are induced constitute the "armature winding." The winding is supported, usually by being embedded in slots, well insulated, on an iron or steel core called the "armature core." Winding and core together constitute the "armature," though this term is also used, loosely, when the armature winding alone is meant.

(Continued in next issue.)



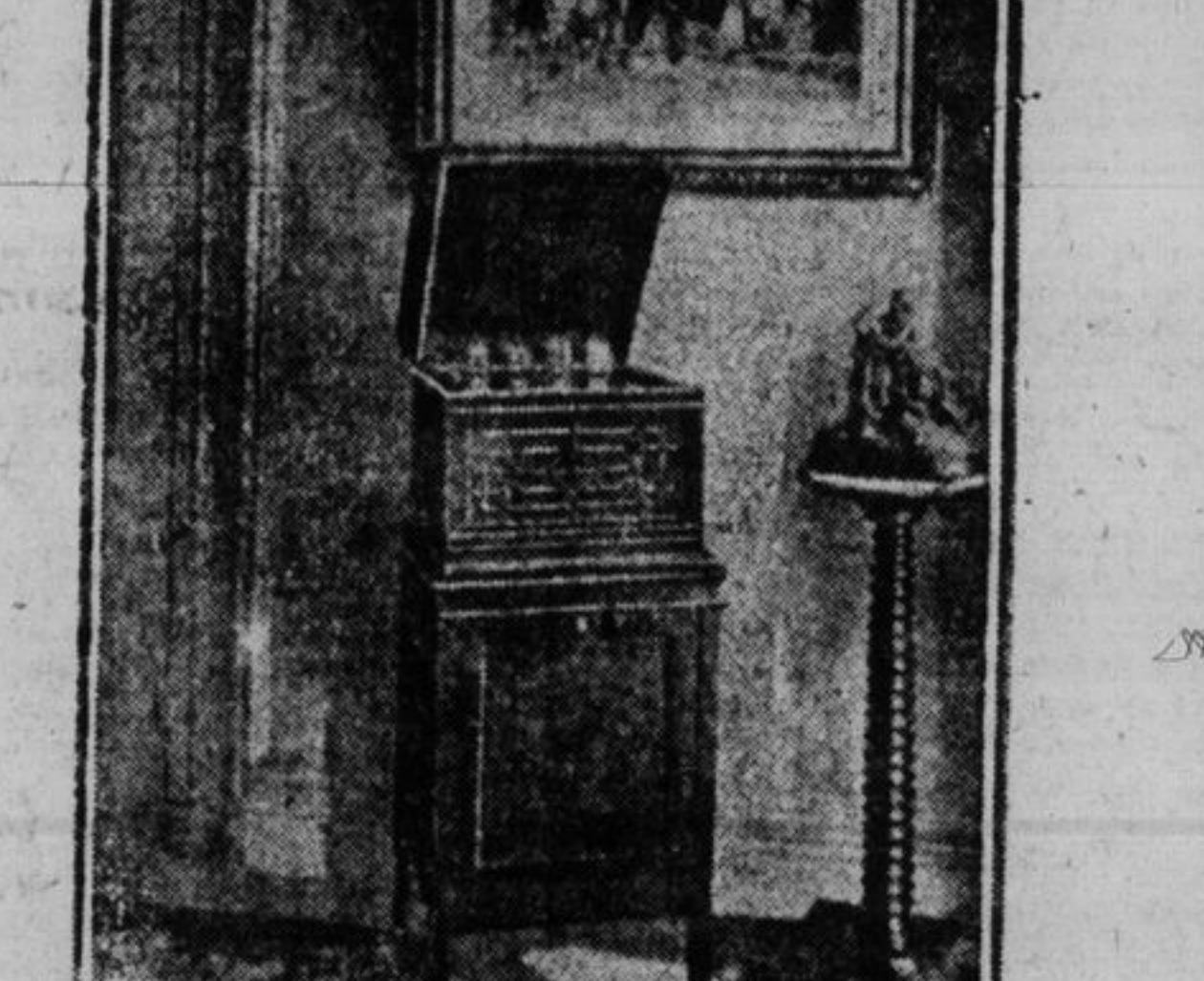
APPARATUS AND DEVICES

By RALPH BROWN, RADIO ENGINEER

RECEIVER DE LUXE.

Radio reception these days is not confined to the home made variety, nor is the modest priced receiver satisfactory to the fan with the long green. The accompanying illustration shows to what extent the present demand for radio equipment has reached. This beautifully designed set

incorporates the latest in radio engineering and produced to harmonize in the richly furnished apartments of our more fortunate experimenters. Notwithstanding its imposing appearance the cost would not appear to be out of proportion, considering the design and workmanship embodied therein.



Will readers interested in these radio articles kindly communicate with the editor by mail?

BALTIMORE PARTS WITH STAR PLAYER

Jack Bentley Sold to New York Giants—The Price is Not Announced.

John McGraw, New York, began the task of rebuilding the pitching staff of his two-time world's champion Giants. He took the rubber band off his bank roll and purchased Jack Bentley, star left handed pitcher and first baseman of the Baltimore Orioles, for what club officials called a "substantial sum." As a part of the deal several players will be turned over to Jack Dunn, the Baltimore manager, after the spring training trip next year.

Just how substantial the sum is, was not announced by the New York club. However, it is certain that the Giants had to go high for this minor league star, who as a southpaw pitcher won 13 out of 14 games and as a first baseman batted .349 this season. Reports in late September put Bentley's market value at about \$100,000.

Many major league clubs were bidders for Bentley's services.

CHICAGO BOAT WILL ENTER IN NEXT SEASON'S RACES

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