FOOTBALL.

QUEER DEVICES WORN BY PLAYERS.

"Harness" Used to Guard Against Injury--Origin of the Canvas Jacket--Interest in the Game.

Anybody who goes to a big football match nowadays will marvel at the "harness" and "armor" worn by the players. Twenty years ago canvas, moleskins, nose masks, and shin guards were unknown to the young men who rushed, kicked and tackled. In those days a common long-sleeved jersey, an ordinary pair of long trousers, heavy walking shoes, ank a skull cap made a football uniform complete. But the rough tackling caused many a jersey to be torn to shreds. It was in 1876, according to Mr. Tracy Harris—the famous ex-Princeton player—that a student at the Jersey college by the name of Ledru P. P. Smock, who hailed from Hightstown, N. J., and was alleged to have run a hundred yards down hill in 9 1-15 seconds, presented himself as a candidate for three-quarter back on the Princeton eleven. Smock's jersey was torn repeatedly, so that he concluded to find some remedy for the evil. Accordingly he made a sort of jacket out of canvas. It laced up the back like corsets, and Smock required the assistance of a friend to get into the thing. When he appeared upon the field he was the laughing stock of the students. He was guyed unmercifully and ridiculed by everybody who saw him. But Mr. Smock had nothing to say. He just waited for the game to begin, and the moment he got the ball he dashed right in among his opponents. Tackling in those times was high, and, of course, sundry wild grabs were made for Smock's neck and shoulders. But he slipped through the grasp of every one. Several players lost their finger nails in their efforts to stop the wearer of the improvised canvas jacket. As the game progressed it dawned upon the players that Smock had invented something worth thinking about, and it was only a few weeks afterward that home-made canvas jackets were worn by several players. A year after that canvas became popular in all the big colleges and schools, although many players continued to wear jerseys only. Trenchard, captain of the Princetons of to-day, never wears canvas. It was the custom to wear flannel knickerbockers along about 1880, but canvas trousers without padding came into use shortly afterward. The heavily padded moleskin trousers did not make their appearance until about 1886, but they instantly became popular and are universally worn now. Cowan, of Princeton, was the first player to wear shin guards. In a scrimmage he was badly kicked on the shin and would not play another game until he had improvised a guard for each leg. It was made of tin and proved quite serviceable. But in 1887 the sporting goods dealers began to make guards that resembled cricket greave. Most players, especially those holding places in the rush line, wear them nowadays.

As a protection for the face a sort of rubber mouthpiece, such as baseball catchers used to wear before the mask was invented, was used by many players in 1880 and succeeding years. But in 1889, at Springfield, John Cranston, of Harvard, appeared with a device that startled the onlookers. It was a small wire mask that covered his nose and mouth, and was strapped on his face by a rubber band that encircled his head. In every scrimmage that Cranston took part in this wire arrangement was always sure to cut somebody. Cranston made no bones of running into other players, head on, without suffering injury to himself. This wire mask gave Capt. Cummock an idea, and he imparted it to John Morrill, the ex-baseball player. Morrill, after trying several schemes, invented a rubber nose mask, which is worn by players all over the country. When one of these masks has been strapped on to a man's face, it is a question of which is the more beautiful, the man or a gorilla. In the last two or three years players have been wearing all sorts of devices to prevent injury. Pads to be worn over the ears, helmets to protect the scalp, supports for the abdomen are among the principal things donned before going upon the field.

Last year the Harvard eleven went a bit further than the other colleges in the way of uniforming themselves, for the men suddenly burst into view wearing those celebrated leather suits, the bill for which caused such controversy between the members of the team and Financial Manager White. But the new attire was not a howling success, and the chances are that the Harvard players will return to the time-honored canvas togs this season. The adoption of all these new fangled things, however, convinces us of one thing. The game in the past five years, not including this season, has grown dangerous. The flying wedge and mass plays, invented by Lorin F. Deland, and introduced by Harvard a few years ago at Springfield, served to increase the chances for injury. In fact, there never were so many accidents as marked the games of a year ago, so that the public demand for a change in the rules led to the appointment of Messrs. Walter Camp, of Yale; W. A. Brooks, of Harvard; Alex. Moffatt, of Princeton; John C. Bell, of the University of Pennsylvania, and P. J. Dashiel, of Lehigh, as a committee to draw up new rules to govern the game. That they did their work conscientiously and well is evidenced by the increasing popularity of the sport and the remarkably small list of injuries so far this season.

The interest in the game is spreading every day. This is proven by the increasing strength of such teams as those representing Cornell, Lehigh and the University of Virginia. The University of Pennsylvania has also improved. The game as played in all of the big preparatory institutions and in all of our public and private schools gives proof that it has a firm hold upon the younger element, who, as they grow up, will enter the higher institutions of learning as full-fledged football players.—[New York Sun.

THE FINEST DEPOT.

St. Louis' Claims for Its New Passenger Station.

The boast of St. Louis that in the new passenger station recently opened there it has the finest building of the kind in the world is pardonable, if not literally true, for the main structure is spacious and architecturally imposing, and the equipments on a most elaborate scale, says an exchange. The total cost, including land, buildings, power-house, train shed, and tracks, were $8,000,000. The passenger station itself is 80 by 456 feet, and is three stories in height, surmounted by a clock which can be seen from all parts of the city. The material is gray stone. The ground floor is taken up by the carriage entrance, concourse, restaurant, post-office, telegraph office, barber shop and washrooms, emigrants' room and ticket office. The second story contains the general hall, ladies' and gentlemen's waiting-rooms, the dining-hall, kitchen, smoking-room, news and cigar stands, and parcel and check rooms. The third story is occupied by the Terminal Railroad Association's offices. The waiting-rooms are richly decorated, and are elegant in their appointments. Especially is this so in the case of the ladies' waiting-room, which has a tiled floor, walls of blue and white and gold, and heavy oak furniture. The train shed, which covers twelve acres, is built of iron and wood, with a concave glass roof. There is room in it for thirty tracks, besides approaches, platforms, and mail and baggage sheds. Five million pounds of iron and four million feet of lumber were used in its construction.

Beyond the train shed are three express-houses and a milk platform 350 feet long. The houses are 250x50 feet, and provided with spurs of tracks on one side and a pavement for teams on the other. But of all the features of the new station, the arrangements for handling traffic are the most interesting. The thirty tracks are joined by a system of switches to the four main tracks within the passenger station. The power to work the switches and signals is furnished by compressed air delivered through pipes from the power-house. The wires are set in motion electrically by means of small magnet valves. When the operators in the tower desire a certain switch or signal thrown, they move a small lever, three or four inches long, which closes the circuits in the tower, and by working the magnet valves at the switch or signal lets in the compressed air which completes the movement. The interlocking system is so constructed that it is impossible to make a mistake. Every switch in a given route must be set in its correct position before the signal can be given for the train to move. In like manner, after a signal is once given a train, it is impossible to move any of the switches on the route governed by the signal or give signals for any other routes. The interlocking machine is the largest in the United States. It has 66 switch levers, and 65 single levers, controlling 130 pairs of movable switch points and 103 signals. Some of the switches and signals are nearly 2000 feet distant from the tower, a distance which would make it impossible to handle them mechanically. Over 127 miles of insulated wire were used to connect the various switches and signals with the tower.—[Picayune.

An Appeal to Woman's Vanity.

During an equestrian performance, a number of ladies in the front stood up, thus obstructing the view of those persons who were seated. In vain were they collectively requested to sit down, till at last a happy thought occurred to one of the sufferers. He called out, in measured tones, "Will the pretty lady in front kindly sit down?" whereupon about fifty old women briskly seated themselves.—[New York Journal.

The monthly rate of wages for London policemen is $85.

A hospital for lepers is to be built in Southern Iceland.

Valuable Woods.

The woods of Central and South America are, perhaps, the most remarkable as well as the least known. In the yet untouched forests of this continent are many woods far finer than those now in use. These woods range from pure white to jet black in color, and many of them are most beautifully marked and veined. Some of them are so hard that they turn the edges of axes, chisels and other tools, while the band saw cuts them only slowly. In the Columbian Exposition there were many displays of little known woods, and the finest of them were those from Argentine Republic, Brazil and other South American countries. Some of these southern woods yielded to the teeth of the band saw, not the ordinary saw dust, but fine powder, fine as the finest flour, so hard were the woods. Some of them burnt but slowly. Others possess qualities that keep them free from insects. Some of them seem to be practically indestructible by air and water. All along the eastern slopes of the Andes, up to the snow line on those great elevations, throughout all the great river valleys, and in some of the wide areas of level country in South America are great forests of fine woods that are specially fit for the finest cabinet and furniture work, and also for shipbuilding, carpentry and other industrial arts in which wood is the "raw material." These great forests are now an unknown quantity in the commercial world, but they will come rapidly into the knowledge of men and into industrial use when once the railroad has reached them —[Lumber World.

An Ice Cave.

An ice cave has been discovered in Coconino County, about six miles south of Flagstaff, says the Phœnix (Arizona) Republican. The entrance to the have is from the side of a cliff. The cave itself is a great depth from the surface. Huge icicles suspend from the roof and beneath them have been formed what may be called ice stalagmites. These have been joined together and form a great ice body. The ice is formed by water which percolates through the roof, and is as nearly pure as is possible by any process of filtration. It is said that a commercial use will be made of the ice. The cave has not yet been fully explored. This is an addition made to the Arizona wonders. A gentleman who came down from the Mogollions yesterday had a description of the cave from one of the men who discovered it. U46

One-fifth of the 10,000,000 families in France have no children.

AChinese Newspaper.

In Canton, by the way, is produced the only independent Chinese newspaper printed in the empire. Others printed in Hong Kong, which is out of the jurisdiction of the Emperor, sometimes criticise his Majesty's government most severely, and use terms which, if employed within its dominion, would probably result in the proprietors, the editors, the staff, the compositors, together with their families, being put to death, with various approved, though inelegant, gradations of Tator barbarity. I had a long interview with Mr. Kwong Ki Chiu, the proprietor and editor of the Kwong Pao (News of Canton), who initiated me into many of the details of Chinese newspaper publications. This paper has a daily circulation of over 3,000, and is posted to Chinamen in all parts of the world for a subscription of $8 yearly.—[Century.