## Football in Armour.

By Charles Emerson Cook.

[From Photographs specially taken in the United States for George Newnes, Ltd.]



A COLLEGE FOOTBALLER IN FULL ARMOUR. By courtesy of " The Sportsman's Magazine" of New York.

HE game of football in the United States is confined almost exclusively to the colleges -baseball being the national sport. account of the climate the season is short. It begins when the colleges open in September, and ends with the 1st of December. Yet in that short two months, popular enthusiasm runs and the strong, armoured knights of the football field fill the public eye.

There are naturally

many differences between football as played in England and America; but to the spectator, to whom the game means chiefly the reaching, by one team, of its opponent's goal, and who enjoys aspects and effects

rather than signs and causes, the conspicuous disadvantage of the American game is in the point of roughness. The highest American authority, Mr. Walter Camp, explains that the feature of the American game, in distinction from the English, is "the outlet of the scrimmage," or, as it is called in England, the "scrum."

An equally vital difference, and one of much more recent development, appears in what is called " interference." This is the assistance given to a runner by one or several companions who go before and break a path for him, or who shoulder off would-be tacklers. To an Englishman this is the most unpardonable kind of offside play, not to be tolerated for an instant upon any field. In America, however, it is of first importance. Interference properly developed demands something from nearly every player. There are eleven men on each side, and of the twentytwo men on the field, I should say that twenty are expected to take a part in every play. So that when a runner is tackled and thrown, there at once rises above him a pyramid of writhing humanity, conspicuous for its scarcity of heads and its abundance of legs. Every man of the opposing team has dropped on him in order to forbid his progress, and every man of his own eleven, in the endeavour to pull off the others, becomes mixed in the scrimmage and buried in the mass. Then, at a shriek from the referee's whistle, the players subtract themselves from the human pile, with the possible exception of the man underneath. He may be waiting a second to get his wind; possibly, in spite of his armour, he is more or less severely injured.

Let us go with the player to his dressing-

room and watch his preparation for the game. First comes the jersey; and we notice that the vulnerable parts (the shoulders and the elbows) are heavily padded. Thin bandages of woven cotton or silk are often worn on the wrists, to prevent dislocation, and similar contrivances are used on the ankles. As the ankle, however, is liable to serious hurt by being turned or sprained, the player sometimes needs substantial a more support made of wellfitting leather, carefully laced and worn under the shoe.



A WRIST BANDAGE.

These are the only bandages in general use, but other special bandages are ready for special needs. One player at some time may have suffered a dislocated knee, and, bearing in mind the proverbial "ounce of prevention," he provides himself with a "knee-cap bandage." Another player, for like reasons, wears a bandage on the forearm or the elbow. A third-and this man is the rule rather than the exception-wears a "shoulder-cap bandage," which is contrived of elastic woven silk, is secured by a band passing around the chest, and is worn next to the skin on his weaker shoulder, usually the right, to prevent dislocation during rough push-playing.

The essentials of leading importance, however, in a football player's outfit are the trousers, the jacket, and the shoe. Sometimes the trousers and jacket are joined at the waist, as is shown in the illustrations, but more often the gar-

ments are separate. The trousers especially are made with the greatest care. They must be fairly loose and of some stout material, such as fustian or moleskin; but their special feature of defence is the padding. Besides the heavy quilting with which the trousers are lined, great thicknesses of wadding or hair are bunched at the knees or over the hips. The thigh, also, is a particularly vulnerable part in a rough game, and so is often protected by sewing a pair of shinguards, minus the straps, on the inside lining of the trousers.

The football jacket is made of a special quality of thick white duck, sewed with the stoutest of linen thread. Usually it is sleeveless. It should fit closely, but not too tightly, and is sometimes provided with elastic pieces set in at the sides, back, and arms. The innovation a few years ago, whereby leather suits were used, was made at Harvard; and as such a suit proved not only an excellent defence against blows, but also, by reason of its smooth and hard surface, made it difficult for the opponent to hold the wearer, it was



AN AMERICAN FOOTBALL SUIT, SHOWING KNEE PADDING.

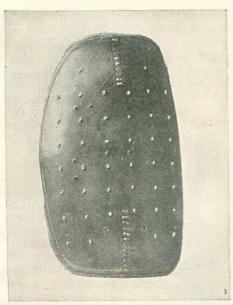
highly approved by some authorities. But a suit of leather is expensive, and, in spite of its lightness and its advantages in rainy weather, it was this expense that prevented its general adoption by the colleges of the United States.

As a matter of fact, however, this ingenious football armour, which stern necessity and American inventiveness have devised, permits the roughness while lessening the danger. Reports from thirty-seven institutions of learning in the United States reveal few permanent injuries—a result due largely to protective armour. In the rules governing American football is a clause which forbids the player to wear projecting nails or iron plates on his shoes, or to use any metal or greasy substance on his clothing. The last precaution was found necessary, a few years ago, when someone conceived the idea of oiling the players' suits. Thus, when it was found

that the runner could slip easily through the grasp of the tackler, the latter overcame the



A HEAD BANDAGE.



LEG-SPLINT, OR PROTECTOR, WORN UNDER SUIT-LEATHER OUTSIDE, PADDING INSIDE.

difficulty by covering his hands with resin. Consequently, the ball became so coated with grease and pitch that it would stick to the player's hands, twisting his most careful throws

and passes into curiously defiant curves and tangents. Then, when the oiled jacket was ruled out, a leather jacket was made to take its place; but the greatly increased cost soon cast that into unpopularity. It will be seen, therefore, that the part of the rule with which the inventor of defensive football armour had to contend was that which forbade iron plates on the shoes and metal on the clothing. Obviously he must procure, for his purposes, material which would protect the player without injuring his opponent—a problem simple enough as regarded the jacket, the trousers, the bandages, the supports for waist and ankle, and the headharness, but which, in the making of nose-guards, shin-guards, and shoes presented some difficulties.

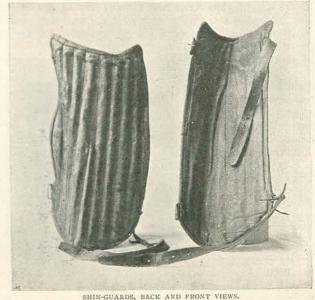
Next comes the shoe. This is the most important part of the uniform; consequently its evolution, deprived of the use of metal, presented the most serious difficulties. But, at length, from the primitive canvas-shoe, with leather cross-pieces nailed on the sole to prevent slipping, was developed a shoe made entirely of leather. It is of moderately stout material, fitting the foot firmly, yet comfortably, and lacing well up on the ankle. The sole is provided with a small leather spike, which can be renewed when worn down. Inside this shoe, and either attached to the bottom of it or not, as the player prefers, is the thin leather anklet which laces tightly over the foot, and is an almost sure preventive of sprained ankles.

It was almost a pity that circumstances rendered the wearing of the spiked shoe necessary. There was no more frequent cause of contention between opposing American footballers than "spiking." Several times within the past ten years serious

> charges have been brought against various members of the Harvard and Yale teams for brutal use of the spikes. It was so easy, you know, to deposit your foot upon an opponent's neck, and seriously injure



THE SPIKED SHOE.



him with the brutal nails. The defence was usually that it was almost impossible for a runner to know where his foot was going to land when he floundered in the "scrimmage," and if it happened that somebody's cranium got in the way — well, that was the mere mishap of the game. Happily,

however, the leather "spike" has changed all this. The worst that a brutal player can now do with his soles is to bruise a man, and even this practice is heartily

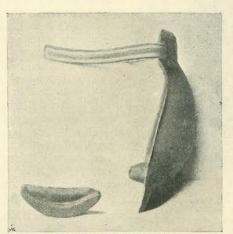
despised.

The shin-guard, with its long ribs of rattan between two stout thicknesses of leather, is far less conducive to vigorous adjectives than the nose-guard. This hollow mask is fastened to the head by an elastic band and, besides defending the nose, is held in the

mouth as a protection to the teeth. And, being made of the finest rubber, the man who is not wearing it may punch the nose of the man who is without fear of injuring or being injured-a strangely childish pastime, you will say, but one which, in a hard-fought, irritating game, brings with it as great a moral satisfaction as in certain emergencies one may find in a forcible and timely swear-word. If the player, however, has friendly confidence in the resisting powers of his own nose, or cultivates a special enmity against

the man who dares hit it, he uses only a small rubber mouthpiece, which, by keeping itself in, keeps the dirt out, and which is perforated with small holes for breathing.

The finishing touch to the defensive armour worn by the player of American football is the head - harness; and when we behold him in full pride of this last disfigurement, we thank all the



SIDE VIEW OF NOSE-GUARD.

gods of the game that American football is still confined to American fields. In combination with nose-mask, shin-guard, and all the other paraphernalia, the costume is well calculated to strike terror to the heart of a hero-not to mention a not over-courageous bull-terrier—and an English bull-terrier at

> that-who, when I appeared before him in full war-paint, let out a yelp of dismay and disappeared under the

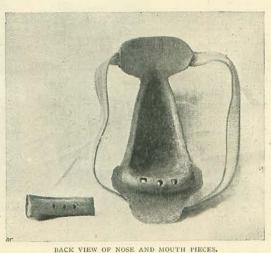
nearest table.

Yet, with all its æsthetic failings, this head-harness is among the most valuable adjuncts to the football armour. It is a comparatively recent device, resulting from the fact that in past years many of the most serious injuries have been to the players' heads and ears. The old style headharness is specially de-

signed for protection to the ears, the drums of which are peculiarly liable to injury in a scrimmage. Under the circular pieces of leather, which more than cover the ears, and which are perforated with holes so as to permit hearing, there are ovals of thick padding which surround them and rest against the head. protectors are held in place by strips of soft leather passing over and around the head and under the chin. In the later headharness the leather is heavier and is every-

where lined with a half-inch thickness of felting; so that no matter what part of the player's head strikes the ground, it is sure of a soft reception. This harness, likewise, protects the ears by a double thickness of felt-lining.

There are other features to a complete suit of football armour, such as the wire abdomen-protector, the leather-shell, and the corset. The first





THE RUBBER MOUTH-PIECE.

is similar to those used in other outdoor games. The shell is merely a concave piece of leather, well padded, and is used only to protect a painful bruise. The corset is a cylindrical piece of padded leather, and is laced about a fractured limb.

It is but natural that all these fiercely grotesque inventions should prompt either a frown or a smile from the conservative Englishman who, since his gentler game of football needs no such defences, must regard them either as an indication of brutality or as a very huge joke. If the last be true he will find a ready sympathizer in the everready American lampooner. This individual tries to console the football captain for the loss of a generous handful of cherished hair, by saying that one of the opponents' ears is hanging by a shred. "What's an ear more or less?" moans the bereaved captain. "I'd give both ears to have back that bunch of hair." Or perhaps the same wit-vendor will lead you to an hospital where the assistant is telling the house-physician he has just

admitted an aeronaut who fell 2,000ft., and a football-player who got tangled up in a rush. "I am the only doctor not engaged," says the assistant; "which shall I attend to first?" Then the house - physician waxes wroth. "Have I not often told you that in a case like this you must attend to the man who is most seriously hurt? The balloon man can wait, of course! Look after the football-player!" And then, when the patient has recovered, and the doctor tells him football is a pastime he must strive to forget, a sad, far-away look will come into the half-back's eyes. "Forget! How can a man forget when he sees an ambulance in every street?"

One of the most curious things about the American football player is his hair. He revels in long and shaggy locks, and, during the months of face training, it is the habit of the American comic artist to picture the head of a football player by the side of a highly-cultivated chrysanthemum, and then calmly challenge you to say which is which. But as everyone understands that the roughness of the game will



OLD-FASHIONED HEAD-HARNESS.

not admit the wearing of caps, and that the head must be protected, the long and flowing locks of the footballer are treated with respect.

The cost of football armour varies greatly with the quality of the material, but it may

roughly be said that a ten-pound note or a fifty-dollar bill would cover all expenses for an up-to-date, impregnable outfit. When new inventions in the details of the armour come upon the football market, the price is slightly increased. Sometimes, in the case of final games between the big colleges, as between Harvard, Yale, Princeton, and the University of Pennsylvania, an entirely new outfit is provided to each player; and one of the great items of expense during the football season is the cost of the armour, not only for the "'Varsity" teams, but for the substitutes, and other

likely players who are too poor to buy the outfits themselves. Truly, much money seems to be thrown away in changing a good-looking athlete into a temporary monstrosity.

Allowing, however, that the armoured American football player does present a somewhat ludicrous figure, we should still not forget that the defensive features of his dress are the results of hard study and harder experience. The man who sees in them only proofs of brutality must be reminded that

the player himself is one of the most generous and big-hearted fellows alive, always ready with sympathy and self-denial. As has been said, injuries do occur; but they are usually the result of the player's youth or inexperience, or the lack of intelligent precautions and

> proper training. They are rarely serious or permanent. Moreover, proper allowance should be made for the American spirit, which cannot comfortably endure When an defeat. American player is injured, he himself is most largely responsible. He is so overflowing with courage, bravado, or whatever else one may choose to call it - "sand" is the popular word - that while he realizes the danger, feels the hurt, sees the impending defeat, he is all the more ready to face the chance, to defy the pain, and, though at the very risk of his life, strive with a good heart in the belief that defeat

the belief that defeat will yet be turned into victory. While a chance remains he is not beaten. Every time he comes up smiling, gaining determination from every mishap. He regards every one of the eleven men on the other side as his personal opponent. Thus, he multiplies his dangers as well as his responsibilities; and when you regard his armour, from spiked shoes to headharness, repress that covert smile, and be inspired with a feeling of brotherly gladness that he is so well defended against himself.



MODERN HEAD-HARNESS, WITH COMBINATION NOSE AND MOUTH PIECE.