

DEADLY, BRUTAL RAIDS ENLIVEN TRENCH WARFARE

Monotony of Existence Broken by Preparing for Assaults or Against Them.

RIFLE IS OF LITTLE USE

Sandbag or an Indian Battle-ax or Spiked Club the Better Weapon—Inventions Fight Snipers and Trickery—Many Saved by Steel Corsets.

By FREDERICK PALMER.

British Headquarters, France.—In today's modern machine warfare, where every man was supposed to have become a pawn without initiative of his own, has been developing the deadliest form of sport imagination can conceive, where every combatant places his cunning, his strength and his skill in hand-to-hand fighting against those of his adversary.

Hardly a day passes that there is not a trench raid. No subject is more tabooed in its details by the censor. Commanders do not want to let the enemy know why their raids succeed or fail, or why the enemy's succeed or fail. Invention fights invention; secrecy fights secrecy.

All the elements of boxing, wrestling, fencing and mob tactics plus the stealth of the Indian who crept up on a camp on the plains, and the teamwork of a professional baseball nine, are found of value.

The weapon least needed is the rifle. A sandbag or an Indian battle-ax or spiked club is better. A good slinger without any weapon at all may take an adversary's loaded rifle away from him and knock him down and then kick him to death.

The monotony of trench existence these days is broken by preparing for raids and against them. Battalion commanders work out schemes of strategy which would have won them fame in smaller wars. Fifty men or a thousand may be engaged in a raid. It may be on a front of fifty yards or a thousand.

Its object is to take as many prisoners and kill and wound as many of the enemy as you can in a few minutes; and then to get back to your own trench. If you try to hold on to the piece of trench you have taken, the guns are turned on you, the bombers close up on either side, and machine guns and rifles are prepared to sweep the zone of retirement.

An uncanny curiosity gives the soldiers their incentive for the raids. Ordinarily they never see their enemy hidden in his burrows across No Man's Land from their own burrows. Unseen bullets from unseen snipers crack overhead. Unseen guns suddenly concentrate in a deluge of shells.

Grim Monotony Continues.

For months this sort of thing goes on, and the trenches of the adversaries remain always in the same place; grim monotony of casualties and watching continues.

This arouses the desire to "get at" the enemy which the trench raid satisfies. It means that you are going to spring over your parapet and rush across No Man's Land into the very houses of the enemy, and man-to-man on his doorstep prove whether you are a better man than he is.

To go over the parapet ordinarily means death. In order to make any rush there must be "interference," as they say in football, and the barb wire in front of the enemy's trench must be cut. This is usually done by the guns, which become more and more deadly in their ability to turn accurate sprays of destruction on given points. They cover the rush and they cover the return of the raiders with their prisoners.

But the guns are not all; there are all kinds of organized trickery in order to enable a body of soldiers to get into the enemy's trenches for a few minutes of activity, when the invaded throw themselves on their invaders at such close quarters that it is a question if even a revolver is now a practical weapon.

You cannot throw it over a traverse and you can a bomb. Running into a German around the corner of a traverse, a blow may be better than a shot.

There have been trench raids where every man who went out was responsible for a casualty or a prisoner, while the raiders' own loss was not one in ten to the enemy's. There are also failures.

Success requires that every detail should work out right. The British inaugurated trench raiding, which the Germans promptly adapted. Where its development will end no one dares venture to say. One advantage of any raid is that those who return are bound to bring back some information of value to the intelligence corps.

Steel Corsets Save Lives.

"Score one for breastplates," said an officer who had been doubled over by a shell fragment which hit him in the abdomen. Instead of a flow of blood crimsoning his blouse, all that was visible through the rent in the cloth was an abrasion on a steel surface.

"But for your new corset your aorta would have been opened, and you

would have been dead by now," the surgeon told him.

Early in the war an officer who wore protection of this kind would have been frowned on by his fellows as unsoldierly. A type of corselet of small plates of highly tempered steel joined together by steel wires is being more and more worn by officers.

Its structure adapts itself to the movements of the body, it weighs only a few pounds, and, fitting snugly as a vest, it is not cumbersome. If the son of Lord Shaughnessy, president of the Canadian Pacific, who was killed recently, had been wearing one, his life would have been saved. Since then Canadian commanders have strongly urged all their officers to buy corselets. This is at any rate better than no protection against bullets, unless they are spent. Such is their power of penetration that they go through the thin steel, "mushrooming" and making a larger wound than if nothing had been in their way. But in the trenches, unless one shows his head above the parapet and in moving about in the shell zone in the rear of the trenches, one is rarely exposed to a charge in face of machine gun and rifle fire he takes off his corselet.

On average days in the trenches the main danger is from shrapnel bullets and fragments from shell explosions, which may inflict ugly and fatal wounds preventable by comparatively thin protection to such a vulnerable substance as human flesh. Together a corselet and steel helmet pretty well shield vital parts from missiles of low velocity.

The use of the corselet is practically limited to officers, who pay for them out of their own pockets. The expense and labor of supplying all ranks of a great army with them would seem out of the question.

But gradually all the British soldiers are being supplied with the steel helmet after their successful use by the French, who first introduced them. The French pattern is quite graceful beside the British, which is round and somewhat the shape of a toadstool. The British is heavier

than the French, and there is merriment in its soup-plate grotesqueness. Thanks to its form, a bullet which strikes it in front, instead of going through the head, as in the case with the French helmet, glances and follows the inside of the helmet, passing out at the rear.

Curate Gets Victoria Cross.

The Victoria cross is rarely given even in this war of countless deeds of bravery. The Rev. Noel Mellish, a London curate, is the first chaplain in the British army to receive the cross since the second Afghan war of 1879.

On the occasion of the presentation the units of the famous fighting army were drawn up in division, forming a hollow square on the spring green of an open field. In the center stood Mr. Mellish with another officer, who received the distinguished service order. In the front lines stood other officers who were to receive lesser decorations.

Before pinning the ribbon on Mellish's breast the general read a brief account of the deed of gallantry that won him the honor. When the ceremony was over those witnesses impressed with an extremely slender and boyish figure scarcely looking his thirty years, and indeed, looking more a gentle and reserved man of peace than a fighting parson.

The general told how again and again, fighting at St. Eloi under a murderous fire, Mellish had risked his life to attend the wounded and bring them to places of safety. Then there was a call of three cheers from the troops and these were given with a mighty roar.

As already told in dispatches, Second Lieut. Arnold Whitridge, Yale 1914, son of F. W. Whitridge of New York, was among those receiving the military cross for gallantry in continuing to direct the fire of his battery in the face of some of the hottest fighting recently experienced, and with the enemy trenches but a few hundred yards away.

Whitridge is one of a group of young American college men who joined the British artillery early in the war.

WAR BREAKS UP ENGLISH ESTATES

Owners Are Forced by High Taxes to Dispose of Their Holdings.

FARMERS ARE DOING WELL

Squires Cannot Raise the Rents and Cannot Live on Their Income in Old Style—Newly Rich May Buy.

London.—"Country life in England will undergo and is undergoing a revolution such as England has not witnessed since the Norman conquest."

In these words Frank Hirst, editor of the Economist and one of the leading authorities on economic subjects in England, summed up one of the most striking effects of the war. What he means is that the country gentlemen of the old school are disappearing, squeezed out by the high taxation, the death duties, and killed off in many instances in the service of their country. Their places are being taken by men who have grown rich in supplying goods that are needed by England's immense armies, or who are making tremendous profits out of the necessities of the people by taking advantage of the conditions created by the war.

"What will happen to the stately mansions of England after the war?" Mr. Hirst asked. He answered his question as follows: "In individual cases the answer depends on the investments of the owners. A man who has invested in Brazil or Mexico is in a specially sad way, while the man who has put his money in ships or coal is very fortunate indeed. But on the whole the fate of the landed gentry and of the country seats depends on taxes.

Savings Swept Away.

"Taxes have already risen high enough to make it certain that most large houses will be to let or for sale, for most country people before the war had places which fitted their income, with a comfortable margin for savings or special expenditure. Most of them will have to move into smaller houses if they can find tenants or purchasers. The doubling and trebling of the income tax has swept away that margin, and the higher the flood of taxation rises the fewer country seats will remain unsubmerged.

"Evidently there will be a wholesale migration and country life will undergo a revolution such as England has not witnessed since the Norman conquest. Some of the finest estates, I expect, will be bought up by English and American contractors who have made fortunes out of the war office and the ministry of munitions. Others will perhaps be cut up by the labor ministry and parceled out among disbanded soldiers whose jobs are gone and for whom no other employment can be found.

"The present public expenditure of the government is supposed to be about equal to the whole of the private incomes of all the inhabitants of the United Kingdom. If Alfred the Great had lived until now and had throughout his long life of more than a thousand years burned one £5 (\$25) note of the Bank of England every hour of

the day and night he would not have destroyed as much money as Mr. McKenna is adding every fortnight to the national debt."

Selling Their Estates.

Mr. Hirst's view is fully borne out by the men who are in close touch with the landed gentry. A member of a famous firm of estate agents through whose hands most of the sales of property of this description pass told me that hardly a week goes by that he is not called on to arrange the sale of some large country estate and that the smaller estates are being placed in his hands for disposal by the score.

"The country gentlemen of England," he said, "simply cannot live under the new conditions. Most of them are dependent absolutely on their rents for their income. A man has a couple of thousand acres which have been in his family for centuries. He lets the land out to farmers, many of whom have been on the land as long as himself. The rents were fixed years ago when agriculture was depressed and, although times are good for the farmers now, it is too soon to raise rents.

"No one knows whether the present high prices for agricultural products will last, and at any rate the farmers have a good many bad years to make up. The squire simply cannot raise the rents and he cannot live on his income in the old style. The taxes now take more than a quarter of it, and the death duties, if the property should happen to change hands two or three times in quick succession, as may well happen and has happened recently in many cases in these days of war, eat up the capital. What is the man to do but try to get rid of the property, which instead of a source of income has become a burden to him?"

"So far there has not been much difficulty in finding purchasers, for there are many people in this country who have made money out of the war, and the Englishman who makes a fortune is always in a hurry to acquire a country seat. There have been a good many American inquiries, too, and some purchases by Americans, but not so many as one would have expected.

BULLETS YEARS IN BRAIN

One Was Above Evans' Right Eye and One Was Behind His Right Ear.

Sacramento, Cal.—Carrying in his brain two bullets that were fired at him by a posse in 1893, when he and George Sontag, train robbers, terrorized the people of Fresno and Tulare counties, Chris Evans, who has been on parole from Folsom prison since May, 1911, walked into the county hospital here recently and asked that the doctors remove the lead and relieve him of pain.

Accordingly, Evans, who is now seventy years old, was operated on by Dr. W. J. Harris, superintendent of the hospital. The bullets were causing his right side to become paralyzed. One bullet was in the brain above the right eye, and the other behind the right ear.

Evans, on obtaining his freedom from prison, worked for a time as a city watchman at Portland, Ore.

Followed Mother's Example.

Pittsburgh.—Miss Harriet Gertrude Blum, aged sixteen years and leading soprano in the Calvary Methodist church, and Hearne Neely, organist in the same church, eloped to Cumberland, Md., and were married. The mother quickly forgave the daughter, declaring that she did the same thing when she was sixteen years of age.

Ill. charging that they sold him a machine for \$5,000 with which he could make \$20 bills. Sorochyn alleges he is the victim of a confidence game.

Triplets by Cesarean Operation.

Omaha.—Triplets were born by a Cesarean operation to Mrs. Anna Richter, wife of a farmer of Murray. According to Omaha surgeons, this is the first case of the kind on record. The operation killed the mother, while the babies died later.

ROAD BUILDING

MATERIALS FOR A CULVERT

If Good Building Stone Abounds in Locality It Would Be Advisable to Use This Substance.

By PAUL D. SARGENT, United States Department of Public Roads.

Available material in the locality where the work is being carried on will generally determine the material of which culverts will be constructed. For example, if we are in a country where good building stone abounds, it would generally be advisable to use this material for culverts.

If no stone is handy, but good gravel may be secured, plain concrete, or reinforced concrete, may be found to be the most economical material. In some localities we shall have to resort to the use of pipes. My experience has been that while a good culvert may be constructed by the use of vitrified tile, its use in most cases has been a failure. This is due to lack of proper care in laying the pipe.

All culverts, of whatever material, should be carried to a good foundation. Generally speaking, I would recommend that the waterways of stone culverts be paved, and that concrete culverts be built with a concrete floor, although this is not always necessary. In any event the side walls should be carried to a good, firm foundation, and each end of the culvert should be provided with a cut-off wall carried below the frost to prevent undermining by the water.

Pipe culverts should be laid on a good, firm foundation. If the natural soil does not provide this, a foundation should be excavated from twelve to fifteen inches below the bottom of the pipe and crushed stone or gravel should be placed in the excavation and the culvert well bedded on this foundation. A head wall should be provided at each end of the pipe culvert to prevent the concrete or stone culverts, to prevent the water from getting under the culvert, or along the side of it, and washing it out. Cast iron water pipe and corrugated metal, if of good, pure iron, will be found to make satisfactory culverts where a small opening is necessary.

All culverts should be laid on a grade and, above all things, they should be provided with a good outlet to take the water away from them. Sometimes this will necessitate the



Concrete Road and Bridge in Connecticut Park.

digging of a ditch from two to six or seven hundred feet long, but the ditch must be dug if necessary; the drain is a failure unless we provide the outlet.

All culverts should be covered with a cushion of earth to prevent traffic from coming directly on them. In the case of stone or concrete culverts, six or eight inches under the macadam or gravel surfacing will be sufficient. With pipe culverts there should not be less than twelve of eighteen inches, and two feet of cover under surfacing material will be more satisfactory.

ROAD BUILDERS ISSUE A MAP

Tentative Routes of 100,000 Miles of Articulated Highways in United States Are Shown.

The National Highways association, that body of enthusiastic lookers into the future, has prepared a map showing the tentative routes of 100,000 miles of articulated highways which it thinks should network the United States in an orderly manner.

This map is the expression of one of the main ideas of the association, namely, that trunk-line roads are the first requisite—through routes leading from somewhere to somewhere, and that the feeder roads must naturally follow the development and improvement of these main lines. The theory is like that on which the great railroad systems of the country were built.

Highway Bond Issue.

About half the counties in the United States have issued highway bonds. The total amount of highway bonds issued by the counties aggregates about \$300,000,000, and the total of all highway bonds, including the bonds voted by the states as well as the counties, amounted on the first of the present year to not far from half a billion dollars.

Dampness Causes Roup.

Roup often accompanies the damp and dark poultry house.

World's Record for Cod Catch.

Grimsby, England.—All records for cods from a fishing voyage to the odd waters of Iceland have been broken by the trawler Aspasia, the 24,000-odd bringing \$22,750. The catch was made in three weeks.

Miners to Share Profits.

Denver.—Colorado—Increases in wages, generally on a profit sharing basis, affecting approximately 5,000 metal miners of Colorado, is to be made by the leading operators. The change is to become effective on June 1.

Queer Things in Marken



ON THE MARKEN CANAL.

IF THERE is one place on earth more conservative than all the rest, that place is the little Dutch island of Marken, in the Zuyder Zee.

There are only five hundred inhabitants on the island, and all are, in a measure, related. For centuries no stranger has ever been permitted to settle and live there. So unfriendly are the Markenites even toward tourists that an inn or hotel is not permitted on the island. To stay all night you must bribe an unscrupulous Markenite to let you sleep in his food attic.

The people have an indescribable dialect of their own which staggers even a Dutchman.

Although they can reach Amsterdam in less than two hours by gasoline launch, the women never leave the island, and the men leave only on business.

Their attitude toward the people of Holland and the inhabitants of any other country is one of antipathy and strict isolation.

In addition to being the cleanest people on earth, they are most peaceful. No alien power has ever had any perceptible influence on them.

Fashions Don't Change.

Fashions of men and women do not change in Marken. They are wearing the same styles today that their great-grandmothers and great-grandfathers wore. From infants to old women, all dress alike. Women never wear mourning, but add a piece of black material either to the left or the right side of the sleeve, or to some part of the skirt to designate the relationship to the member of the family deceased.

Boys and girls are dressed alike until they are six years old, and can be distinguished only by a button on the cap of the boy, and a rose on the cap of the girl. The sixth birthday is a great event in the life of every boy, for it is at this time that he dons his corset and dress and puts on male garb. The only change that girls make in the mode of dress is that on the day of marriage corsets are laid aside never to be worn again, and it becomes stylish to wear many underskirts. This gives a hoop-skirt effect.

The men and the boys over six years old habitually wear what Americans would call bloomers, and a loose plain jacket with a couple of gold or silver buttons on the collar.

The Markenites are tall, heavy of frame, have eyes of bluish gray, sand colored hair, conspicuously poor teeth and large lips, which they seldom close. This description applies to both men and women who, according to our standards, would be called stupid looking.

Women's Ages Uncertain.

It is difficult to tell the age of the women. One little woman, her face a network of wrinkles and most of her teeth gone, proudly held up a three-week-old baby for inspection. It was dressed exactly like her. To one who did not know, she would have been taken for the grandmother, but as matter of fact, she was only twenty-eight years old, and this was her first child.

Their houses are all pretty much alike. There is never more than two rooms downstairs, a dining room which is also kitchen, and a living room and bedroom combined. There is always a fireplace of old blue tiles. From the rafters hang jugs, dried fish and hams. The Markenites are not meat eaters.

The Pretty Girl.

Give the pretty girl her due. Why should she not have her share of honest praise? Too often when one comes to investigate he finds a half-contemptuous note in the description of some girl whose beauty stands out so prominently that it blinds the observer to her other virtues. Yes, other virtues. In itself beauty is a virtue, just as cheerfulness and unselfishness and sincerity are virtues. It is almost as hard to cultivate these others as it is to take thought and add a degree to beauty. Often they are natural gifts, and yet a girl with these natural gifts is given credit for cultivating them, while the one who is "only pretty" is condemned on the ground that she has had nothing to do with her looks, that heredity or luck or something else made her pretty, and that she is satisfied to be pretty and nothing else. Give the pretty girl her due. Admit that whether she wills or not she is doing a service in the world, just as the rainbow or the violet or the mountain do their part. And admit, too, that usually she is glad to render her share to the joy of the world, that,

sung but usually unappreciated, she is doing something for the good of humanity.—Columbia State.

Remittance Wanted.

For hours the sympathetic mother had listened to her son's tirade against the college that had expelled him in disgrace and against his father for abetting them in it. "But, dear," she said at last, "you really cannot blame your father for being angry. You must see that you have made a very bad return for all his unremitting kindness." "Ah, that's just it," retorted the irate student. "If it hadn't been so comfoundedly unremitting I could have pulled through."

Judged by His Talk.

"Is it possible to become habitually optimistic?" "That depends a great deal on a person's environment and the way in which he earns a living."

"Yes?" "I notice that after a man has sold suburban real estate for a few years a hundred square feet of swamp seems to him a Garden of Eden in disguise."

THE KITCHEN CABINET

Wherever a noble deed is wrought, Whoso'er it speaks a noble thought, Our hearts in glad surprise To higher levels rise.—Longfellow.

DAINTY PUDDINGS.

Boil a cupful of water and pour into it six tablespoonfuls of cornstarch, mixed with a cupful of fruit juice; cook until clear, add sugar to taste and fold in the beaten whites of three eggs; cook two or three minutes to set the eggs, then add a pinch of salt and pour into a wet mold to cool. Serve with a custard sauce made of the yolks of the eggs. Serve cold.

Prune Whip.—Stew a half a pound of prunes until soft, then set aside to cool after draining off the liquor. When perfectly cold chop very fine. Beat the whites of six eggs to a close firm meringue, add six tablespoonfuls of sugar and add the prunes, covered for 20 minutes so that the soufflé has risen to its full height. Send to the table immediately with a sauce made of a cupful of whipped cream, sweetened and flavored.

Rhubarb Pudding.—Roll out a thin piecrust and heap on a cupful or two of chopped rhubarb and a half cupful of raisins. Roll up and place in a deep dish. Add a cupful of brown sugar, two tablespoonfuls of butter and a cupful of boiling water. Place in the oven and bake an hour. There will be sauce enough to serve with the pudding of the juice and sugar.

Date Pudding.—Take a third of a cupful of softened butter, add a half cupful of sugar, one egg beaten, a cupful of milk, two and a half cupfuls of graham flour, three teaspoonfuls of baking powder, a little salt and a cupful of dates, cut fine. Steam two hours in a covered mold. A tube mold is better.

Caramel Rice Pudding.—Wash a cupful of rice and cook it in salted water (one cupful) until it is absorbed. Add a quart of hot milk and cook until the rice is soft; then add two well-beaten eggs. Melt three-fourths of a cupful of sugar until a light brown; cover the bottom and sides of a pudding dish with this caramel. Turn in the rice and cook in hot water for half an hour. Turn upside down on a serving dish and let stand ten minutes, and it will slip out easily.

Character must stand behind and back up everything—the sermon, the poem, the picture, the play. None of them is worth a straw without it.—J. G. Holland.

DIFFERENT SAUCES.

The art of making and serving an appropriate sauce is one which should be cultivated as many plain dishes may be made most appetizing by a fitting sauce.

Drawn Butter Sauce.—Cook together a tablespoonful of butter and a tablespoonful of flour until brown and dry. Add a cupful of boiling water, cook two minutes, stirring well; add salt and pepper to taste. Using milk and adding it before the flour is brown makes a white sauce. With half cream and half white stock flavored with mushrooms and a dash of lemon juice it becomes Bechamel; cut out half the flour and add the yolks of three eggs, lemon juice, onion and another tablespoonful of butter for a Hollandaise; double the proportion of flour and it furnishes a thick sauce for delicate croquettes.

Brown Sauce.—Cook a half a tablespoonful of flour in a tablespoonful of butter until well browned; add a tablespoonful of chopped onion with other vegetables if liked; cover and simmer until soft. Add one cupful of water or stock, a half teaspoonful of salt, six peppercorns, a half a bay leaf and simmer gently ten minutes. Strain and serve.

Oyster Sauce.—Parboil and drain a half pint of oysters. Add cream to the liquor to make one cupful, prepare as white sauce adding the oysters at the last.

Loberst sauce is prepared the same way, using stock instead of cream and mashing the lobster before adding it to the sauce.

Bread Sauce.—Crumble fine stale bread crumbs in a saucepan with a half cupful of milk and six cracked peppercorns. Let simmer five minutes, then add a half cupful of cream, a teaspoonful of salt, but do not stir; simmer until all is absorbed. This is excellent to serve with roast birds.

Nellie Maxwell

Turks Care Little for Stage. At Kadi Keul, the ancient Chalcedon, is situated the one and only Turkish theater in or near Constantinople, a rickety, wooden construction capable of accommodating, however, a large number of onlookers. Performances are witnessed only by men, are given three times a week, and take place in broad daylight.

Mr. Pester is Unkind. "Does your niece sing?" "That is what she calls it," replied old P. G. Pester. "I don't know why."—Judge.

Small Girl's Compliment. We had recently remodeled our home, making it into bungalow style, having a long, almost steep roof, with bungalow windows in it. A little girl came up to my husband one day and said to him: "My, you've made your house over, haven't you? It looks awfully cute. It looks just like a barn, doesn't it?"—Chicago Tribune.

Same Old Game. "What are you doing now, Jim?" "Any easy mark I can come across."—Baltimore American.