WARS KILL OFF BIGGEST MEN

NAPOLEONIC WARS HAD BAD EFFECT ON FRANCE.

He Won His Victories at the Expense of His Own People.

Correspondents on the European battlefields have been struck with the smallness of stature of the French soldiers, and with the French people in general. They are an inferior race physically to the English or the Germans. Although they live in practically the same climate and under the same conditions, they have not been able to attain the size of their neighbors, says the St. Paul Pioneer Press.

Another striking fact is the difference in size of Frenchmen themselves. The American-Frenchmen, whose ancestors came here prior to the French revolution, is much superior in physique to the Frenchman of to-day in France. While the Frenchman with a long American ancestry is every whit the equal in size to the Englishman and the German, his European cousin seems to be of a smaller species.

The answer is found in the loss of life of the Napoleonic wars. Napoleon was a small man himself. He was known affectionately by his men as the Little Corporal, but prior to Napoleon's time the French as a rule, were big people. The explorers, who marched through the wilderness of America and explored the wilds of Canada and the Mississippi Valley, were men of massive build for the most part. They were the pick of the earth as far as physique is concerned. The trappers and early French settlers who succeeded them, were

Men of Good Physique.

Their descendants are the present French-Americans.

While Napoleon occupies more pages of history than any other man, he put his name there at the expense of his own people. War takes the bravest and biggest men. Every war is a sacrifice of the best. With all the world against him, Napoleon had to go to unusual extremes to win his ends. He raised himself to the imperial throne, but he did it by lopping off the heads of his own people and by taking their flesh.

When Napoleon finally was imprisoned at Saint Helena, the average Frenchman was two inches smaller than he was at the time of the storming of the Bastile. When Napoleon's guard fell in the sunken road at Waterloo he had completed his career in cutting twenty pounds of flesh from his own people.

While the world has marveled for a century at the great genius of Napoleon it has had to admit that his genius had no good effect on the physique of the French people.

Napoleon cared little for his sick and wounded. That probably heightened the list of casualties on his campaigns. The following figures show how dearly Napoleon's wars cost the French people: In the Peninsular campaign the casualty list was 460,000 men. In the Moscow campaign his loss was 480,000 men. The Leipzig campaign cost 100,000 men. Those three campaigns followed one after each other and were at the close of Napoleon's career.

The Present War in Europe

will have a similar effect on the size of the future Europeans. The nation which will be likely to suffer most is the most efficient fighting nation. The indications now are that nation is Germany. She is fighting on all sides. She has many more men who can fight than any other nation. England has only a few hundred thousand fighting men on the continent. France has less than Germany. Russia probably has a good many more fighting men than Germany, but she has not so many so fiercely engaged. Should the Germans win, their victory will be won at the price of their own bravest and best men.

Napoleon was considered victorious up to the time of the Russian campaign. He there lost so many men that he never was able to fight as he did before. Had he been defeated before crossing Germany he might have won in the end, because he would not have left his army in Russia to be eaten by the wolves or buried by the Cossacks.

Napoleon, in speaking of the disaster at Saint Helena afterward, admitted it was a big mistake. Reports have it that his divorced wife, Josephine, advised him not to go on the campaign. Speaking to General Gourgaud of the disaster, he said:

"I did not want to make war on Russia, but M. de Kourakine sent a menacing note on the subject of the conduct of Davout troops in Hamburg. Bassano and Champagny, then my foreign ministers, were inferior men. They did not understand the real motives that had dictated the note and I could not possibly in my position exchange explanations with Kourakine. They persuaded me that the note was meant for a declaration of war and that Russia, which had withdrawn her troops from Moldavia, was going to take the initiative and was about to enter Warsaw. Then Kourakine grew menacing and asked for his passports. I really thought that Russia wanted war.

I Set Out for the Army.

I sent Lauriston to Alexander. He was not received. I had already sent Narbonne and everything confirmed me in the opinion that Russia was ready for war. So I crossed the Nieman near Wilna. Alexander sent a general to me to assure me that he did not wish for war. I thought his mission was a ruse to prevent General Bagration from being intercepted. I went on with my military preparations."

Las Cases said: "If your majesty had made peace with Spain and withdrawn your army from the peninsula you might have had from 150,000 to 200,000 more men." "But," replied the emperor, "that would have been 200,000 more men lost. It seems that when I was at Moscow Alexander wished to treat with me, but that he did not dare because he was surrounded by partisans of England. He was afraid of being strangled. I would not have declared war upon Russia but that I was persuaded that she was about to declare war upon me. I well knew the difficulties to be encountered in such a campaign."

(In Russia the war was popular, as the people chafed against the restraint of the continental blockage Napoleon established. Gourgaud thought that Napoleon might from the nature of his tents and preparations, have been preparing for a campaign on India if his Russian campaign were successful.)

BRITISH MANUFACTURERS.

Testing Time for Which They May Be Grateful.

It will be an interesting sidelight on the present crisis to note how Great Britain will successfully meet the situation. It will be a testing time for which probably British manufacturers will yet be grateful, says an English paper. It will show at least what they can as well as what they cannot do. For instance, those who imagine that the pretty, inexpensive silk frocks will be no longer available will learn that both taffetas and satins and many of the prettiest of silk and woollen mixtures can be made in Britain, for during the past few years the manufacture of these and fine woollen materials has been pushed forward to a great extent in the northern and midland counties of England. Covert coating is an excellent proposition just now, and that is, of course, a typical British product. And with the winter in prospect we remind ourselves that the cloths for coats we call "fur substitutes" are practically all British-made, and that there alone we have a very important asset.

Although fashion will not be followed with zest the fact that winter designs had already been decided upon before hostilities upset the calculations of British and Continental fashion centres will have some effect on the general appearance of our clothes. Tunics and coats are spreading, and this will certainly be a feature of this winter's silhouette. The wearing of serge will be more than ever popular; it is somehow in tune with the circumstances of the moment—elegant, yet unselfconscious and practical.

KEEP ALL WOUNDS OPEN.

Antiseptic Methods Used at Boulogne Hospitals.

An English medical correspondent who has been visiting the military hospitals at Boulogne writes: "A feature of the Casino Hospital is the bacteriological laboratory attached to it. Sir Almroth Wright has recently come to Boulogne and presides over this department. His researches have already established the fact that the gangrene and septic conditions met with so frequently are due to micro-organisms which flourish only when removed from the atmosphere. This discovery has had the most important bearing upon the surgical work of the hospital, because it has demonstrated the necessity of keeping all the wounds open and allowing the air to reach them. Wounds kept well open are found to heal most satisfactory. The guidance of eminent consultant surgeons and also of the surgeons of the Royal Army Medical Corps itself has led to the pursuance of a most conservative policy, and limbs are now saved which in less favorable circumstances must have been lost."

Why Should He Pay?

Once an old colored man visited a doctor and was given definite instructions as to what he should do. Shaking his head, he started to leave the office when the doctor said:

"Here, Rastus, you forgot to pay me."

"Pay you for what, boss?"

"For my advice," replied the doctor

"Naw, suh; naw, suh; I ain't gwine to take it," and Rastus shuffled out.

Staked Pits, with Wire Entanglements; a Deadly Device Used by the Austrians.

This is a form of field-obstacle, turned to account on occasion in conjunction—as seen in the photograph above—with barbed-wire entanglements. The pits are of different depths and at irregular intervals, and, where a number of men are available for the digging, can be excavated and staked in no long time. The obstacle is ordinarily laid within as close range of the defenders' firing-line as possible, to impede any attempt to "rush" the position and hold the assailants back, checked and "hung up," as it were, all the time under fire, so that the bullets of the defence may do their deadly work. In the fighting in the Austrian Danube provinces and on the Serbian border, obstacles such as these have been largely employed.

CRUSH GERMANY ON THE SEA

GREAT BRITAIN NOW MAKING GREAT PREPARATIONS.

United States Visitor to England Tells What He Saw in Davenport.

A description of what a United States visitor saw at close range in the vast British naval plant at Devonport, England, is thus set out in the New York World:

14 Ships in Six Months.

What is going forward at express speed behind the walls of Britain's navy yards, if it were known to the German authorities, would dispel decisively any Teutonic belief that Admiral Jellicoe's fleet intends to restrict its activities to blockading the North Sea and keeping the Atlantic and other oceans clear of enemy vessels.

Within six months the lists of the royal navy will be augmented by six super-dreadnoughts and eight battle cruisers from its yards at Devonport and Portsmouth alone. All of these ships will be equipped defensively and offensively more powerfully than any men-of-war of their respective classes now afloat. At least one of the super-dreadnoughts, for example, has an arrangement of turrets which is quite new and which permits big calibre guns to be fired broadside or straight ahead with equal facility.

No less than 9,000 men are employed night and day at the Devonport station, and there are always some 5,000 sailors and marines on guard there against attack from without or within—which latter refers to the very real peril of espionage.

It is not generally known that the tremendous expanse recently added to the Naval Barracks—as the Devonport point is known officially—includes six dry docks capable of holding the biggest battleship yet designed by the Admiralty's draughtsmen. It's a close fit, to be sure, when a giant of the Queen Elizabeth or Iron Duke class squeezes into one of these docks. Quite recently, the American visitor was informed, such a ship came back from the North Sea to have a few repairs made. After she was all in the dry dock, there was just six inches to spare at either end!

Siege Howitzers.

At present a very large number of men are engaged constantly at Devonport in turning 12, 13 and even 15 inch battleship guns into siege howitzers.

This operation is performed by detaching the gun from its turret, cutting down its muzzle and mounting it on an artillery carriage of special design and great strength. Owing to the Royal Navy's superfluity of big naval weapons the number of heavy howitzers now with the British expeditionary force—as the Germans have already learned to their cost—is almost equal to that of the enemy's complement.

Warspite a Wonder.

The superdreadnought Warspite, most important of the men-of-war building in the Devonport yard, is thus described:

"Suddenly we—my officer friend sleep to stand shivering behind and myself—stood alongside a dilapidated looking vessel, which I took to be an obsolete cruiser. My companion briefly introduced this object as His Majesty's super-dreadnought Warspite, of the Queen Elizabeth class, none of which are in commission as yet. The Warspite will be ready for action, so I learned, within six months. At present she is lying in one of the basins in the yard, submitting to the attentions of many hundreds of workmen, who clamber about her vast bulk like veritable ants. On the quay alongside of her are reposing the massive 15.5 guns, ten of which she will carry.

"Even my layman's eye could detect and appreciate the wonderful arrangement of her turrets, which, I am told, is absolutely new. They are laid each somewhat like boxes in a theatre, each jutting outward from the one ahead in such a way that she can fire all ten of her fifteen-point-fives from the bow as well as broadside on.

Torpedo and Mine Proof.

"The wonderful slope—flange is the technical word—of her bow, narrow at the water line and widening in such a way as to offer the least possible resistance to the seas, is indicative of her great speed—twenty-six knots an hour—greater than that of the Mauretania! She displaces 28,000 tons of water. Most important of all, perhaps, is the fact that she has a triple coating of armor below the waterline.

"That and other features which it would be improper to reveal make her practically immune from any existing torpedo or mine. That is, she maye be badly damaged by an explosive below the waterline, but she cannot be sunk by one. Her fuel is oil exclusively, no coal being used aboard her except for culinary purposes.

"She and her sisters are real beauties. Of course the reason she looked so unassuming to my unpractised eye was because she had not been painted and was partly concealed beneath all sorts of scaffolding. Her cost will be close upon $15,000,000 before she leaves the hands of the engineers. And to think that such a vessel can be completed in eighteen months!"

Machinery and War.

No other great war has depended so much upon machinery as the present. In the opinion of the editor of the Scientific American this fact may do much to hasten the end of the struggle, through the wear of the machine rather than the exhaustion of the man. Gun and motor car are undergoing a test of endurance such as they have never undergone before. Every time a gun is fired some of the interior surface with the delicate rifling is wiped away with a proportionate loss in accuracy, and the larger the bore of the gun the greater the erosion. "Even more severe," says the Scientific American, "must be the depreciation that is going on in the motor-car transport service. The motor car is a highly-developed machine, which calls for careful upkeep to maintain it in full efficiency. In ordinary commercial service the motor car and the automobile receive, as a rule, considerable care and watchful maintenance. In the present war, however, the treatment of those vehicles must, in the nature of things, be absolutely brutal, and the depreciation must be very rapid. Where are the repair shops that can keep pace with this depreciation, and how shall the necessarily enormous wastage of the war be made good?"

Befogged.

A London merchant received a telephone message one morning from one of his clerks. "I am sorry, Mr. Wilson," said the clerk over the wire, "I can't come down to the shop this morning on account of the fog; but the fact is that I have not yet arrived home yesterday."

The man who makes good doesn't wait for opportunity to knock. He has the door wide open.

BARB WIRE ENTANGLEMENTS.

How Soldiers Overcome These Defensive Obstacles.

As has been learned from the reports from the war, barb wire entanglements have been freely resorted to by both sides for protecting their positions, and in a general way it is known that these consist in a number of irregular lines of strong posts set solidly in the ground with a maze of lines of barbed wire strung between them; but how these obstacles are overcome has been left for explanation to a military expert who has an interesting story to tell in the Scientific American. Some of the many schemes that have been tried are described as follows:

Experiments have been made in removing whole sections of wire at once by means of a rake, to which a wire rope is fastened. This is thrown over an obstacle, and thirty men pull upon the rope. Thus a section eleven and one half feet wide and sixteen and one half feet deep is torn out. In order to reduce the time required to pass through a barbed trap (the glint of the wire is usually concealed by a bank of earth) some military engineers have thought that it is a waste of precious minutes to cut or tear it down, and that it is more rational to surmount the obstacle in some way. Structures of boards, ladders and bags should be thrown over the wire, according to their ideas, and upon the pluatform thus made the men can press forward. Boards eigst feet long, nine inches wide and three-quarters of an inch thick, are fastened together by means of three cross pieces, leaving a clear space of three inches between the boards. The weight of the double board is thirty-two pounds, and sixteen of them are employed, each carried by a single man. To place the sixteen double boards on the wire net requires about one hundred and forty seconds, as actual tests have shown, and it takes seventeen men sixty seconds to pass over the boards. As a time saving-expedient, therefore, the method is hardly a success over that of wire-cutting.

Nor are ladders much better. In some experiments, conducted in England ten ladders with nine rungs each were used. Each ladder, twelve feet long and twenty-two inches wide, weighed thirty-two pounds, and was carried by a single man. The ladders were laid down in one hundred and forty-five seconds, and sixty-five seconds were required by seventeen men to pick their way from rung to rung.

That this idea of surmounting an obstacle rather than cutting a way through it is not practicable, is better shown by the experiments which have been made with bags of cloth and wire. Twelve bags each eight feet long and four and one-half feet wide (measured empty) and weighing forty pounds when filled with straw, were placed upon a net in ninety-five seconds, and seventeen men passed over them in forty-five seconds. When the bags are made of wire poorer results are obtained. Such bags are composed of two pieces of wire meshing, eight feet long and four and one-half feet wide, laid on top of each other and placed together at the sides with wire. A quantity of straw three inches thick is pushed into the wire bag, which then weighs only twenty pounds. It takes ninety seconds to lay sixteen of these bags on a barbed wire entanglement, and it takes seventeen men sixty-five seconds to pass over them.

Cautious.

Edwards—Will you dine with us this evening. We are going to have a pheasant.

Eaton (fond of his stomach)—And how many guests?

NOTES OF SCIENCE

Dry flour applied with a piece of newspaper will cleanse tin.

Spain contains more than 11,500,000 acres of unproductive land.

A French inventor's collapsible boat can be folded and carried within an ordinary suit case.

Pines are believed to live the longest of all trees, some have attained more than 700 years.

Norway has 144 tree-planting societies which since 1900 have set out more than 26,000,000 trees.

A griddle hinged in the centre has been invented that may be turned over to bake a cake on both sides.

Tests have shown that properly filtered oil may be used indefinitely without losing its lubricating qualities.

Two Swiss surgeons have invented an easily used drug which stops the flow of blood from wounds almost instantly.

An effective electric fan that is small enough to be carried in a pocket or handbag is operated by a dry battery.

A system has been developed whereby wireless messages may be received in safety at all times, even during thunderstorms.

In a British arsenal there has been installed a scale that will weigh guns up to 100 tons with a possible error of less than seven pounds.

A new safety razor shaving outfit, including soap and brush, is contained in a case less than half an inch thick for carrying in the pocket.

Many of the largest Japanese warships have been equipped with wireless telephones which operate successfully for distances up to 100 miles.

Much more efficient than metal mirrors, and almost as durable, is a new English one for military purposes which is made of glass in which wire netting is imbedded.

French army officers have solved the problem of travelling over desert sands with a light sledge, driven by an aerial propeller, which makes fair speed and climbs grades easily.

In a costly watch that has been made for exhibition purposes there is a wheel that makes a revolution but once in four years, operating a dial that shows the years, months and days.

For riding on water there has been invented a tricycle with hollow, water-tight wheels, the rear pair being provided with blades for propulsion.

Jail Courtesy.

Warden—Your wife is here and wants to speak to you.

Prisoner—Oh, tell her I've gone out.

First Lawyer—"What did old Moneybags leave?" Second Lawyer—"A lot of disgusted relatives."

"John Henry," said his wife, with stony serenity. "I saw you coming out of a saloon this afternoon." "Well, madam," replied the obdurate John, 'you wouldn't have me stay in there all day, would you?"

Gentleman, to his rustic servant—Well, Jean, did you give the Governor my note? "Yes, sir, I gave it to him, but there is no use writing him letters. He can't see to read them. He's blind as a bat." "Blind!" "Yes, sir, blind. Twice he asked me where my hat was, and I had it on my head all the time. Blind as a bat, sir!"