

BROWNING GUN FOR AIRCRAFT IS O. K.

RATE OF FIRE SYNCHRONIZED WITH REVOLUTIONS OF THE TRACTOR PROPELLER.

BASEBALL CAPTURES LONDON

American Army and Navy Teams Draw Big Crowds—British Officers in U. S. Give Instruction in Gas Defense.

The Browning machine gun has successfully undergone a test to determine its value for use with aircraft. This is one of three types of machine guns with which the rate of fire can be so synchronized with the revolutions of the propeller of a tractor airplane that the gun can be fired by the pilot of a combat plane through the revolving blades.

Airplane propellers revolve at from 800 to 2,000 revolutions per minute. The machine gun is connected with the airplane engine by a mechanical or hydraulic device, and impulses from the crank shaft are transmitted to the machine gun. The rate of fire of the machine gun is constant and its fire is synchronized with the revolving propeller blades by "wasting" a certain percentage of the impulses it receives from the airplane engine and by having the remaining impulses trip or pull the trigger so that the gun fires just at the fraction of the second when the propeller blades are clear of the line of fire.

The pilot operates the gun by means of a lever which controls the circuit and allows the impulses to trip the trigger.

"As the latest wonder of the world London has taken to baseball," says a committee on public information representative in London. "The English never before had much use for our great game. They called it an exaggerated form of rounders and wondered what the noise was all about, but the American and Canadian soldiers in England have been educating them."

"A regular league of eight teams has started a summer schedule, and the English public is learning what it has missed. Big crowds witness the game which is played every Saturday, and the sport bids fair to become widely popular. Here is the way Thomas Burke, the short-story writer, reports a game in the London Star of May 17:

"The game got hold of me before the first pitched ball. The players in their hybrid costumes and huge gloves, the catcher in his gas mask, and the movements of the teams as they practiced runs shook me with excitement. Then the game began and the rooting began. In past years I have attended various football matches in mining districts where the players came in for a certain amount of rugging, but they were church services compared with the furious abuse and hazing heaped to any unfortunate who failed to play ball."

"There was, for example, an explosive, reverberating 'A-h-h-h-h-h' which I have been practicing in my back yard ever since, but without once catching its true quality. You should have heard Admiral Sims, as college yell leader, when the Navy made a home-run hit, with his 'Atta boy; oh, att-way to play ball,' and when they got an error he sure handed the Navy their."

"Yes; I've got it. From now on I'm a fan. I'm going to see every baseball match played anywhere near London. I shall never be able to watch with excitement a cricket or football match after this; it'd be like a tortoise race. Come along with me to the next match and join me in rooting and in killing the umpire."

In March and April the secretary of agriculture, on recommendation of the office of public roads and rural engineering, approved 212 state road-building projects involving more than 2,500 miles of highways under the federal aid road act. The estimated cost of these improvements to the states is about \$15,000,000. The federal aid allowed is more than \$5,000,000.

Bottlers of soft drinks in the United States may save approximately 50,000 tons of sugar annually by using other sweetening materials, according to investigations by specialists of the bureau of chemistry, United States department of agriculture. The bureau of chemistry is preparing to furnish bottlers with sweetening formulas that will allow the actual sugar content in soft drinks to be cut to 50 per cent or less and at the same time will preserve the customary taste of the beverages. Starch sugar, starch sirup, maltose sirup and honey are the substitutes used.

The army ordnance department has negotiated approximately 12,000 contracts since this country entered the war, involving within \$175,000,000 of the total funds directly available for the department for the present fiscal year—\$3,383,280,045. Additional contracts totaling \$1,503,703,741 have been entered into on the authority of congress pending appropriation of an amount aggregating \$1,671,406,750.

The magnitude of the task of the ordnance department financially is evidenced by the disbursement recently in a single day of more than \$25,000,000 on ordinary contract vouchers. Disbursements for the month of April, 1918, ran to \$356,881,863, an interesting amount as compared with the \$5,059,264 disbursed by the ordnance department in April, 1917. These disbursements were made at the ordnance office in Washington. Amounts disbursed at government arsenals are not included.

One check recently drawn by the ordnance disbursing officer for ordnance material was for \$18,750,000. One requisition made recently by this same officer on the treasury was for \$169,000,000. This is the largest single requisition ever made by any United States disbursing officer.

Prior to two months ago, before the ordnance department established its 11 district offices which zoned the country to expedite payments to contractors and relieve the strain upon the main office in Washington, the disbursing officer at Washington signed from 500 to 3,000 checks a day.

Because of the instruction of gas officers who have been at the various camps for the last six months, the troops which are going forward to France are well posted on methods of combating gas attacks, says a statement authorized by the war department. A group of British gas officers has been in this country since last summer. One of these men has been at each of the training camps, advising and assisting the division gas officer.

All the men going overseas are supplied with gas helmets. Under the division gas officers and their assistants, the men are drilled in the use of masks, taught how to detect the presence of gas, and given actual experience with different sorts of gases. Mimic gas shells and cloud attacks, used often at night in connection with high explosives, help to make the training realistic.

The United States has been able to build on the experience of the British and French, to whom gas attacks were unknown when they entered the war. No American troops have been sent to the front without practical experience in defending themselves against gas.

The training of instructors in gas defense includes a course of about one month. Most of the gas officers are commissioned first lieutenants.

One of the interesting developments of the war, according to a statement authorized by the war department, is the rapid expansion of the various bureaus of the war department. At the outbreak of the war there were less than 3,000 employees on duty. The number now is approximately 25,000, an increase of 800 per cent. While this represents a tremendous expansion, the increase in the army itself has been more than 1,500 per cent.

Only four out of every 100 officers in the service were in the army at the time the war began.

The gas defense service is now manufacturing about 5,000 horse gas masks per day. These are being sent to France, and it is expected that within a short time every horse connected with the American expeditionary forces will be equipped with the new masks.

The gas defense service has a completely equipped factory for the manufacture of the masks. In less than three weeks a building was selected and the factory was producing masks. The introduction of riveting machinery has done away with the heavy hand sewing of the frame which supports the masks on the faces of the horses. The masks are so constructed that no metal or chemically impregnated parts can chafe the horse.

In Bavaria the monthly meat ration has been cut 20 per cent—from 1,000 to 800 grams—according to German newspapers. The monthly meat ration in Saxony has been reduced from 800 to 700 grams. Public officials are reported in the Prussian press as discussing the possibility of a further reduction of the bread ration in Prussia.

A Munich paper reports that from the beginning of the war to March 1, 1918, Bavarian hog stocks have decreased from 2,106,312 to 706,391 head. The Danish hog census shows a decrease from 1,651,000 hogs July 12, 1917, to 780,000 December 5, 1917, or a decrease of one-third the number at the beginning of the war.

The restriction on the importation of crude rubber has been followed by restrictions on importation of four commodities possessing some of the characteristics of rubber, and capable under some circumstances of being used as substitutes for natural rubber.

Acting on a suggestion of General Pershing an order has been issued increasing each regiment's band from 28 to 50 members. Band leaders having had more than five years' military experience as band leaders will be made first lieutenants; those with less than five years' experience will be made second lieutenants.

Beside enlarging the bands a bugle and drum corps will be added to each regiment. Each corps will include the company buglers of its regiment, and not more than 13 drummers.



1—American infantrymen in France entraining to take their places at the fighting front. 2—Survivors of the schooner Edward H. Cole, one of the victims of the submarine that raided American waters. 3—Airplane photograph of a French hospital on the Aisne near Soissons, showing its Red Crosses clearly on the roofs and ground.

NEWS REVIEW OF THE PAST WEEK

German Submarine Raid in Our Waters Fails to Terrorize American Nation.

WAR SPIRIT IS STIMULATED

Splendid Work of Yankee Troops in Halting Hun Drive at the Marne—Enemy's Losses are Appalling—Renewal of Offensive is Expected.

By EDWARD W. PICKARD.

Germany's utter inability to understand the spirit of the nations that oppose her was never better shown than in the raids made on American shipping in American waters by submarines. Their purpose could only be to terrorize the United States and thus check the flow of men and munitions to France. Their result, if Germany but knew it, could only be to inspire the nation to continue the sending of its armies across with uninterrupted speed and in every other way to do what is necessary to win the war. The net loss to America is the sinking of a dozen sailing vessels and two or three steamships; the net gain is a renewed determination to whip the Hun, and a large increase in the number of enlistments for the navy.

Germany attempted to terrorize England by Zeppelin raids on London, and the Englishmen merely turned out their lights and rushed by thousands to the recruiting offices. She tried to terrorize France by bombarding Paris with the "miracle gun," and the Frenchmen gritted their teeth and swore to fight to the finish. Now she has tried to intimidate the Americans, and again she has failed miserably. In truth, the German policy of frightfulness has been a failure everywhere and from the beginning. Even mutilated and ravished Belgium still stands unafraid and steadfast to the cause of decency and righteousness.

The appearance of the submarine or "cannon" in the New Jersey coast naturally revived the talk of the existence of U-boat bases on the Mexican coast. This is officially discredited by our navy department, though there is little doubt that Carranza and his crew would assist Germany if they could. Their behavior and known predilections are not such as to delude anyone into belief in their neutrality. However, there was evidence that the raiding submarines had come direct from Germany, and as they have been out some time, they probably will soon return.

New York city indulged itself in a small scare over the chance that it might be bombed by an airplane carried by the U-boats. There was little danger of this, for a plane would take up too much space on the submarine, and moreover after a raid would be compelled to return to the vessel, thus revealing its location to the naval craft that have been swarming the Atlantic coast waters looking for it. The submarine is driven by Diesel engines that give it a wide radius, and carries guns with which it might shell coast cities. Probably there will be more of these raids in the near future, but they must be accepted as incidents of the great war in which we are engaged—really small incidents that can have no influence on the outcome of the struggle. Some of them are likely to be directed against our troop transports, but this need cause little alarm because of the perfection of the convoy system. To guard the coast against attacks Secretary Baker has asked congress for \$16,000,000 for establishing balloon and seaplane stations, thirteen on the Atlantic and three on the gulf.

Over in France the Kaiser's third pretentious drive of the year came to a halt, at least for the time being, at the Marne, the Oureq valley and the Oise. Early in the week several attempts to cross the Marne were repulsed with severe losses. In these actions American machine gunners supported by French infantry took a prom-

inent part and won the warm praise of the French and British by their gallantry and valor as well as by their excellent marksmanship. The Americans were called on to hold a bridge head near Chateau Thierry immediately on their arrival after thirty hours on the road in motortrucks. They took up their positions quickly and slaughtered the Huns who tried to cross. Under cover of this fire Yankee engineers successfully dynamited the bridges, and the machine gunners have since held the south bank and repulsed all attempts of the Germans to build new bridges. It is reported the Americans killed about 1,000 Germans at the bridge head, having themselves only one man killed and a few wounded.

In the Neuilly wood, northwest of Chateau Thierry, the American infantry had their chance, and three times they drove back desperate attacks of the Huns, their rifle fire being deadly. On the third assault they met the Germans in the open and put them to rout with the bayonet.

In what may be called their own sector, in the Luneville region, the Americans carried out some highly successful operations.

The allies frankly admit that they are counting on the United States troops to save the day, and the costs to which the Yankees have been submitted show the trust of the British and French is not misplaced.

Failing to make further progress southward, the Germans turned the main force of their attacks on the western front of their salient, between the Aisne and the Marne. Here they found any advance still more difficult, and indeed at many points they were driven back some distance by the impetuous attacks of General Foch's troops. In that region the dense forests of Villiers-Cotterets and Neuilly offer the best of defensive positions for the allies, enabling them to move and concentrate their forces unseen by the enemy aviators. The allied artillery, too, has been brought up with remarkable speed and is pouring a devastating fire into the Germans from well selected positions day and night. Along the line from the Marne northward to Reims the allied line was holding strongly, and the ancient cathedral city was still, rather unexpectedly, in the possession of the British.

The Germans made no claims to definite advances during the week, and their losses were growing so appalling that government officials in Berlin felt it necessary to speak of them apologetically, asking the people to consider the magnitude of the operations and of the stake.

Toward the end of the week there were signs that Von Hindenburg was preparing for a renewal of the drive on another part of the line, possibly in the Amiens sector, but the allied military authorities expressed satisfaction with the situation and confidence in their ability to meet any new attacks.

The German press was almost a unit last week in its calls for a peace offensive, but the papers and the factions they represent were as far apart as ever on the question of what Germany should state as her peace aims. The radical press still insists on the no annexation and no indemnity program, while the organs of the pan-German party blantly insist that the central powers are now in a position to make demands and to enforce them, and that though Germany entered the war in 1914 with no predatory purposes, it is now entitled to take what it desires to make up for its losses and to insure its future safety.

There is no longer any pretensions, on Germany's part of treating the Russian provinces as any other than conquered territory, the treaty of Brest-Litovsk being now ignored. Neither is there any evidence that Germany is getting any benefit from those lands, for the food question is still driving the civilian population to distraction; and in Austria-Hungary the situation is far worse.

Greater Russia is actually starving, for the soviet government can procure no more food from the Ukraine, and in the Kuban and Don regions there are counter-revolutionary bands that keep things in a turmoil. The counter-revolution plot, the government says, spreads throughout the country and in consequence Moscow has been declared in a state of siege. It is reported the American govern-

ment is contemplating the extending of assistance to Russia in the way of assembling food supplies in Siberia and distributing them in European Russia.

In equally parlous state is Turkey, where famine is widespread and many of the poorest people are subsisting on chestnuts and pumpkin seeds. In some districts the troops have destroyed the crops though they themselves are on mighty short rations. Only the officers are well fed. With these food conditions, the steady advance of the British in Palestine and Mesopotamia and the growing strength of the Arab forces, there are evidences of the approaching break up of the Turkish empire. It has got nothing yet for all its efforts except certain oil districts ceded by Russia under compulsion, and the possession of these is threatened by the northward movements of the British expeditions.

The Italians kept on hitting hard at the Austro-Hungarian forces along the Piave line, and they heard undisturbed the massing of thirty enemy divisions at three points on that front for a resumption of the drive toward the plains. The Italian army is now in better condition than ever before and, with the help of the Americans, British and French, can be relied on to stop the expected offensive.

The supreme war conference of the allies at Versailles expressed its complete confidence in the ultimate defeat of the central powers and declared the allied people are "resolute not to sacrifice a single one of the free nations of the world to the despotism of Berlin." The premiers of Great Britain, France and Italy agreed on the creation of a united independent Polish state with free access to the sea as one of the conditions of a just peace, and adhered to the declaration of Secretary Lansing expressing sympathy with the national aspirations of the Czechs and Jugos-Slavs. This means, if it means anything, that Emperor Charles has lost his last chance to retain his empire entire by breaking away from Germany. It foretells the dismemberment of Austria-Hungary when peace is made, if not at an earlier date.

In the United States the U-boat raid served to impress the people with the pressing need of the conservation of wheat and sugar, especially. The former must be sent across the ocean in increasing quantities as our forces there grow rapidly greater; and sugar cannot be bought from Cuba because we must use all available shipping for the transportation of troops and munitions to Europe.

The fuel administration devoted its energies last week to urging the people to order their next winter's supplies of coal at once. There has been widespread complaint that the retailers cannot fill orders, but Doctor Garfield says that orders now, whether or not they are filled soon, will do much to stimulate production. There is plenty of coal if only it can be got out of the ground and if the railroad administration will find some way of supplying enough cars. The shortage of cars really is at the bottom of the whole trouble and will be to blame if the predicted coal famine materializes next winter.

The senate's attempt to stop the manufacture of beer and wine by means of an amendment to the emergency agricultural bill was blocked by the administration last week. Food Administrator Hoover opposed it because he believed it would put the nation on a "whisky, brandy and gin" basis with attendant evils far outweighing the small food savings that would result. President Wilson had told Senator Sheppard he would not forbid the use of foodstuffs in beer and wine unless Mr. Hoover regarded such a step necessary. The senate therefore receded from its position.

The week saw the registering of about a million young Americans who have become twenty-one years of age since last spring; and this registration probably will be repeated about once in three months. Provost Marshal General Crowder sent to the governors of all the states except Arizona orders for the mobilization of 200,000 more registrants between June 24 and 28, and 40,000 negroes were called from twenty states.

DRASTIC CHANGES MADE IN DRAFT LAW

BY NEW REGULATIONS ANTE-WAR MARRIAGES NO CLAIM FOR EXEMPTION.

REVISED DEPENDENCY CLAIMS

Claims for Dependency Allowed for Children Born or Unborn Before June 9, 1918.

Washington.—Marriage since the enactment of the selective draft law no longer will be accepted as cause for exemption from military service, except in the cases of men who have become of age since June 5, 1917, who may be exempted if they married before January 15, 1918.

Dependency claims on account of children of such marriages will be allowed where children are "born or unborn before June 9, 1918."

Following is an order sent to all state draft executives:

"Please promulgate at once to local boards the following important amendment to the selective service regulations:

"Rule 5, Section 72, SSR, is amended to read as follows:

"Rule 5A. The fact of dependency resulting from the marriage of a registrant who has become 21 years of age since June 5, 1917, and who has married since the date of the introduction of the joint resolution in Congress requiring his registration, to wit, January 15, 1918, will be disregarded as a ground for deferred classification.

"B. If a registrant who has attained the age of 21 since June 5, 1917, and who has contracted marriage subsequent to the date of the enactment of the selective service law, to wit, May 16, 1918, claims deferred classification on the ground of dependency resulting from his marriage, the fact of dependency resulting from his marriage will be disregarded as a ground for deferred classification unless the dependent is a child of the marriage, born or unborn on or prior to June 9, 1918, in which case such a registrant upon satisfactory proof being made shall be classified in Class 2.

"C. If a registrant, other than one who has attained the age of 21 years since June 5, 1917, who has contracted marriage since May 16, 1917, claims deferred classification on the ground of dependency resulting from his marriage, the fact of dependency resulting from his marriage will be disregarded as a ground for deferred classification unless the dependent is a child of the marriage, born or unborn on or before June 9, 1918, in which case a registrant upon satisfactory proof being made shall be placed in Class 2.

"D. Nothing contained in this amendment to Rule 5 shall be construed as requiring the transfer to Class 2 of any registrant who has been finally classified in Class 1 on the affirmative finding that his marriage since May 18, 1917, was made with the primary view of evading military service."

IS AMIENS WITH CHANNEL COAST THE OBJECTIVE?

The impression is rapidly strengthening that the stage is almost set for renewal of the German main thrust at the British around Amiens with the channel coast as the objective.

Belief has never wavered among the majority of officers here that the real purpose of the German general staff has been from the first to cut the allied armies apart by a drive that would carry them to the channel; that, arrived at that goal, massed attacks would be hurled against the northern sector for the purpose of destroying the British army while a strong defense was maintained against the French to the south. The thrusts at Paris have been looked upon as well planned and executed feints designed to weaken the Amiens front before the final effort should be made there.

O'BRIEN THE TOUGHEST AMERICAN AIRMAN

San Antonio, Tex.—Lieut. Pat O'Brien, British royal flying corps, who survived a battle with four German airplanes, was taken prisoner, leaped from a moving train, wandered more than two months through enemy territory and who finally reached Holland, is suffering a broken nose, caused by the second fall of his adventurous career, which resulted when he took liberties with a student training type of airplane at Kelly field.

SERIOUS COAL SHORTAGE EXPECTED NEXT WINTER

St. Paul, Minn.—The coal shortage probably will be more keenly felt this winter than last, according to representatives of the United Mine Workers' Union of America, who are attending the annual convention of the American Federation of labor. Discussion of the coal situation arose after a resolution requesting the federation to lend its efforts to obtain coal for the New England district had been adopted.