

NOW PRODUCING ARMY RIFLES ON GIGANTIC SCALE

More Than 40,000 Weekly Are
Turned Out Here.

RUNNING AHEAD OF SCHEDULE

Production is Four Times Greater Than British Output After That Country Had Been in War Same Length of Time—Profit by Experience of Our Allies—New Model Big Improvement Over British Arm.

By JAMES H. COLLINS.
(From the Committee on Public Information.)

When the Ordnance department announced recently that its production of rifles had passed the 40,000 mark weekly, the statement was news to the general public, bringing both surprise and relief. To the Ordnance officers in charge of small arms production, however, these figures represented simply the attainment of a production goal that had been planned months before—an important detail in the war program foreseen and provided for just another item in the vast work of preparation, which was running on schedule and a little ahead. By now the production of rifles will have reached the 500,000 mark weekly, and by July 1 our army will have 1,200,000 modified Enfield rifles, originally known as the U. S. rifle, model of 1917, and 700,000 new Springfields of the standard U. S. army type, known as the U. S. rifle, model of 1918. Even if Uncle Sam's own arsenals stop making rifles tomorrow, our private manufacturers would be able to provide vast quantities for several armies of 1,500,000 men. Besides, it has over 300,000 rifles for drill purposes.

This production is four times greater than the British output after a year of war and twice as large as the British output after two and one-half years of war. It is a larger production than has ever been achieved by any country in a similar period, and it means more than adequate supply for all of our soldiers now in France and in training here. For we have a production capacity for creating, in due time, a reserve of rifles at the rate of 250,000 monthly, providing for an increase in our army, if necessary, at the rate of 18 war-strength divisions of approximately 27,000 soldiers each month, as approximately only 50 per cent of the troops in a division are armed with the rifle.

Back of this achievement there are two interesting stories. First comes the industrial story of rifle production in such large quantities—the careful redesigning of the standard British Enfield rifle to take Springfield ammunition; and, second, the story of the superiority of the Springfield rifle over those used by all other armies, including the German Mauser.

Could Not Make Army Rifles. When war came to Europe in 1914 not a single firearms manufacturer in the United States had equipment or workmen for making army rifles. Only the government arsenals at Springfield, Mass., and Rock Island, Ill., were capable of making anything better than sporting arms.

The difference between a sporting rifle and a modern army rifle is great. Sporting rifles are sold to single purchasers as a rule and call for little exactitude in the interchangeability of parts. If something breaks on the sporting rifle, the owner sends it back to the factory to be repaired. An army rifle, however, must be perfectly interchangeable in all its parts, so that pieces of mechanism of one rifle can be used to repair another in the field. Its parts must be made to tolerance of one one-thousandth of an inch. This calls for exact and expensive gauges in large quantities.

The Springfield 1918 is composed of about 100 different parts, and the cartridge-receiving mechanism, including the bolt, alone requires 120 gauges for its manufacture. These gauges can only be made by expert tool makers, of whom there are only a limited number in the United States, and the magnitude of the problem is realized when one knows that thousands of duplicate gauges must be made to equip mechanists and inspectors for large quantity production. First, there must be what is known as a grandmaster gauge, flawless in its dimensions. The grandmaster gauge is used only to check up a number of master gauges and these master gauges in turn are rolled upon to keep the large number of actual working gauges up to the standard. Not only are tens of thousands of gauges required to equip a factory for the production of arms and ammunition on the modern scale, but these gauges must be regularly replaced. It is estimated that the most durable of these become obsolete after 10,000 to 20,000 parts have been checked. The cost of a grandmaster gauge is \$100,000, and a master gauge \$10,000.

Preparing Gauges. No other country has a private manufacturer in this country preparing gauges. The gauges are made by the Ordnance department and after actual production had begun there was trouble with gauges. Contracts were placed with different concerns, each of which undertook to provide its own gauges from grandmaster gauges brought from abroad. When

the first munitions were inspected by British and Russian army officers they found inaccuracies sufficient to cause rejection, and this necessitated overhauling all the separate gauges and the provision of more rigid standards and a centralized inspection system.

When Uncle Sam entered the war he had more than 500,000 Springfield rifles in the hands of troops and in reserve. Government arsenal facilities were inadequate to provide the hundreds of thousands of new rifles required for training a great army in this country and equipping and providing rifle wastage as troops were sent abroad. By that time private firearms manufacturers had developed facilities for large quantity production of the British Enfield rifle, and there was the resource of turning out this arm in large quantities for training purposes during the period of eight or ten months while the draft contingents were being turned into soldiers. The British Enfield rifle uses ammunition different from the United States firearm. Had there been no time for modifications, American troops might have been trained with the British Enfield, using British ammunition, and would have been capable soldiers fairly well armed, so far as the rifle was concerned.

Fortunately, however, our war preparations were laid out in the light of British experience, allowing sufficient time for the training and equipment essential to results in modern war. Therefore it was possible to not only renumber the British Enfield to take standard Springfield ammunition, but to materially improve the British rifle and its manufacture in the light of American experience. By standardizing the parts so that they would assemble readily and properly, the production of the rifle was very greatly accelerated and a reasonable degree of interchangeability of parts liable to break in the field was secured. Our Ordnance experts, backed by private manufacturers, have thus been able to provide ample quantities of the arm known as the United States rifle, model of 1917. This rifle is not officially known as an Enfield, because although the latter served as its basis, it has been redesigned and given features which make it virtually a new weapon.

Adopt Enfield Rifle. While the number of modern rifles on hand at our entrance into the war was nothing like as large as it should have been, it was equal to the number of modern rifles which Great Britain had on hand when she entered the war in 1914. As the necessary machinery was not available to produce sufficient quantities of Springfield rifles in a short time, it was decided to adopt the British Enfield rifle, the production of which was large in this country and could be materially increased to meet our needs in a shorter time than it would require to raise the output of Springfields.

The Springfield rifle was known to be in many respects superior to the British rifle. The British government realized this before the war and had adopted an improved rifle, caliber .276, firing a high-pressure cartridge like the United States government cartridge, but did not have time to make them, and had to retain its old rifle and cartridge.

Our position, however, was different. An army had to be selected under the draft and trained for service, which gave us ample time to make improvements which the British government had intended to make, and which practically placed their rifle, as modified in this country, on an equal footing with our own.

The model 1917, United States rifle, as the improved Enfield is called, is a thoroughly trustworthy and reliable arm in every respect, and no apprehension need be felt when it is realized that it is a great improvement over the rifle which the British forces in France have used so effectively for the past three years and are still using.

ONE OF HUGE GUNS ON FRENCH FRONT



A 24-inch gun in the mouth of one of the huge guns which are holding the Germans in check on the French front.

Costs Ten Cents to Pay Two Cents. It cost a local citizen of Richmond, Va., whose name is being shielded by officials of the Internal Revenue office ten cents to pay a two-cent income tax. The man traveled both ways on the street car at the cost of a dime and reported that he was married and had an income last year of \$2,004. He filled out his blank and handed over two cents.

AMERICAN SLANG FOOLS HUN SPIES

German Linguists Befuddled by
Yankee Talk.

TELLS AN AMUSING STORY

Officer Relates How He Converses With Brother Officer in Presence of Germans—Slang Provided Trackless Country on Which They Could Venture With Safety for Baffling of Inquisitive Ears.

Clever as the German spy may be, great linguists as they claim to be, Americans have found that their vast and rich range of slang completely baffles them.

An American officer who was in Belgium working with the Relief Commission before American entered the war told at the American Officers' Inn in London, where he is at present stopping, an amusing little story of the difficulties he and his fellow workers had in holding any sort of conversation without fear of being overheard by the ever-present German spy, and how they got round them.

"We couldn't talk English without being overheard, somehow, and our conversation was contorted and exaggerated beyond recognition. French was no better, but we found that we had a trackless country, a real No Man's Land on which we could venture with absolute safety for the baffling of inquisitive ears. I'll explain what I mean.

News Sources a Mystery.

"I had just heard that a German in the United States had made an attempt upon the life of the president. It was at a time when every event of the kind was making our participation in the war more certain. How the news leaked out I don't know. I shall never know. That was the peculiarity of news in Belgium. You heard the rumor, but you could trace it to no apparent source.

"In a barber's shop were several German officers. Entered Sperry, of California, who had just returned from a trip in the provinces, and would be likely to know nothing about the report. It would be well if he were informed before reporting at the Pass Zentrale. So the information was coded, and the following dialogue occurred:

"Nix on any of those spangled delicatessen getting wise, but if there were any willing extras in this burg they'd be scrounged about a Heine who just tried to put over the Colozog on the Main Squeeze."

"A pause, and then back from the lathered lips in the other chair:

No Chance for Him.

"I getcha, Steve. What's the next call for dinner in the dining car?"

"You can search me. But I think it is all to the merry."

"Say, when will all those guys stop trying to steal second with the bases full?"

"What do you expect from bush league beans? The kids for them! But tell me, am I taking too long a lead off first?"

"'Atboy' These gazabos will never tumble to the line in a thousand years."

AMERICAN SOLDIERS RESPECT RED CROSS

Do Not Intend to Retaliate With
Acts of Barbarity Shown
by Huns.

Our soldiers are respecting the Red Cross when worn by Germans, even if the Germans have fired upon American Red Cross stretcher bearers and ambulance drivers, as the following dispatch shows:

"Some American soldiers in a lightning post northwest of Toul early this morning discovered an enemy patrol fixing their own wire, and promptly opened fire. The Germans retreated hastily, leaving two of their number hanging on the barbs.

"Several hours after daylight a party of five Germans, two infantrymen and three Red Cross workers, emerged from the enemy lines and started for their comrades entangled in the wires. The Americans saw the Red Cross brassards and did not open fire on the party, which removed the bodies."

Proof is indisputable that the Germans have bombed hospitals plainly marked with the Red Cross, have sunk hospital ships equally plainly marked, have fired upon American Red Cross workers on the battlefield, and otherwise have ignored the emblem that every civilized nation respects.

That our American boys do not intend to retaliate with this kind of barbarity is proved in the foregoing dispatch, and German mothers who have sons wounded will doubtless see the difference between "kultur" as practiced by their own leaders and "culture" as practiced by the American and allied soldiers.

Award for Bravery.

The Croix de Guerre, French decoration for bravery on the battlefield, has been awarded to A. L. Strachan, Jr., of Denver, according to word received by his parents. He was decorated for carrying a wounded companion from the field under heavy German fire.

CARRIER PIGEON ACTS AS CUPID'S MESSENGER

The photo shows Miss Clara Borner of Cleveland who is stopping at a New York hotel, releasing a carrier pigeon carrying a message to her fiancé, Lieut. Roy J. Wilson, U. S. N., who is serving aboard one of Uncle Sam's war vessels in home waters. Lieutenant Wilson is interested in the



use of carrier pigeons as means of communication. Miss Borner sets a shipment of birds from him every few days and releases them from the Waldorf roof. The message the bird carried was as follows:—R. J. W., U. S. N.—Released bird 2 p. m. Hope he qualifies as navy's best flyer and soon carries news of great American sea victory.—Love—C. N. B.

RECLUSE HAD FORTUNE

Relatives of Dead Woman Find It After She Dies.

Relatives of Elizabeth Jane Maffett, octogenarian spinster, who lived in seclusion in an old house near the center of the downtown district of Philadelphia for years, recently found a fortune in gold and silver hidden in the aged woman's home when they went in to clean after she had been taken to a hospital.

Forty thousand dollars were found concealed in various parts of the house, with bank books showing she had nearly \$100,000 on deposit in local banks. The old woman was very eccentric and refused to accept aid from relatives here, though she was thought to be in poor circumstances. She was found unconscious from fumes of a gas stove.

EGG IS BURIED DEEP

Subsequently It Hatched Out a Bird of Unknown Species.

A. J. Dwyer relates that while he and some other men were digging a well at McGary Flats in Canada last June they unearthed an immense egg, which was buried in the sand at a depth of 83 feet, and which measured 19 inches in length.

They laid the egg on the sand and discovered when they returned from dinner that it had hatched a bird of unknown species. The bird was tethered near the spot, where it thrived and grew very rapidly, and at the present time, Mr. Dwyer says, it weighs 233 pounds, and the government officials who have examined it have been unable to name the species. The bird is now an exhibition in Game Warden McCaw's shop at Baneroff.

TELLS OF NIGHT ATTACK

Auto Supply Driver Describes Experience in France.

First hand information of a small attack against American troops in France on a pitch black night is contained in a letter from Lester Lagnabee, auto supply driver.

"There was a coup de main (small attack) near one of our posts," he writes. "It was black as pitch and raining hard. Everything on wheels was pressed into service. It was absolutely impossible for a driver to see. A big Packard truck loaded with 21 wounded jumped into a millpond. "Some drivers ran headlong into fences, wagons, bridges, and one found himself making a bee line for the Boche trenches until his car encountered the barbed wire entanglements."

POOR GIRL AN HEIRESS

Daughter of a School Janitor Inherits \$500,000.

By the death of her aunt, Mrs. Catherine Fratt, which occurred at Billings, Mont., on January 1, Miss Margaret Morrissey, formerly of Jacksonville, Ill., becomes joint heir with a brother of the deceased to an estate valued at \$1,000,000.

Miss Morrissey resided at Jacksonville with her parents until a few years ago, when the family removed to Billings. The family was in humble circumstances, the father being employed for the most part at day labor. For a few years before leaving here he was janitor of the public library.

The KITCHEN CABINET

Let us learn to be content with what we have, let us get rid of our false estimates, set up all the higher ideals, a quiet home; vines of our own planting; a few books full of inspiration of a genius, a few friends worthy of being loved and able to love us in return.—David Swing.

FOR MEATLESS DAYS.

Beans, nuts and various vegetable combinations which take the place of meat may be used to furnish variety. Such foods as dried peas, beans and lentils, need soaking with long, slow cooking. The addition of soda to soften the cellulose is often a help.

Bean Chops.—Soak a pint of dried beans overnight, parboil and drain, then cook in boiling water to cover until tender. Put through a sieve and to the pulp add two cups of strained tomatoes to which a pinch of soda has been added, two tablespoons of melted butter or olive oil, one cup of finely chopped walnut meats, a pinch of powdered sage, one teaspoonful each of parsley and onion finely minced, one teaspoonful of salt, a dash of pepper, a half cupful of bread crumbs, and a well-beaten egg. Turn into a shallow dish and when cold mold into chops. Brush with oil and brown in a quick oven.

Nut Loaf.—Crumble the inside of a loaf of bread, then dry in a slow oven without browning. To three plates of the crumbs, measured before drying, add a teaspoonful of salt, a half teaspoonful of pepper, a dash of cayenne and two tablespoonfuls each of sage and parsley finely minced, a sprinkling of chopped celery and one sour apple finely minced. Melt a third of a pound of sweet fat and fry in it for five minutes one chopped onion. Pour this over the other ingredients and mix thoroughly. Beat three eggs, add a pint of milk and pour over the mixture. Add one cupful each of chopped filberts, pecans and Brazil nuts. Reserve a tablespoonful of the nuts to serve in the sauce. Shape into a loaf and bake an hour, basting often. For the sauce: Melt three tablespoonfuls of butter, add a chopped onion and half a sour apple with three tablespoonfuls of flour, cook until brown, add a pint of milk, nuts, and a cupful of the liquor from the pan in which the loaf was cooked. Cook until smooth. Pour around the loaf and garnish with slices of orange. The sauce may be served in a separate dish if so desired.

Nellie Maxwell

THE KITCHEN CABINET

Over the glad waters of the dark blue sea, Our thoughts as boundless, and our souls as free Far as the breeze can bear, the billow foam Survey our empire and behold our home.

LET MORE MEALS MAKE US DIGESTIONS.

MORE HONEY DISHES.

For those who are interested in producing more honey and thus saving sugar, the Bulletin No. 653 put out by the agricultural department at Washington, will be found most helpful. The following are some of the recipes recommended, slightly changed.

Honey Bran Cookies.—Take a half cupful of honey, the same amount of sugar, a fourth of a teaspoonful of cinnamon, the same of ginger, three cupfuls of bran, a half teaspoonful of soda, half a cupful of milk, half a cupful of fat, and half a cupful of barley flour. Drop on buttered sheet and bake 15 minutes.

Honey Popcorn Balls.—Heat honey to 240 degrees F. with a candy thermometer. This dispels the water and it will be hard when cool. Honey, however, absorbs moisture when left uncovered, so the balls should be kept closely covered or reheated before using.

Honey Carmels.—Take two cupfuls of granulated sugar, a half cupful of cream, a fourth of a cupful of honey, a fourth of a cupful of butter. Beat and stir until the sugar is dissolved, then cook without stirring until a firm ball is made when a little is dropped into cold water. Beat until thick, then pour into buttered pans and cut in squares. Pecans or other nuts may be added.

Salad Dressing.—Take four egg yolks, two tablespoonfuls of vinegar or lemon juice, two tablespoonfuls of butter and two tablespoonfuls of honey, a fourth of a teaspoonful of mustard, a teaspoonful of salt and a few dashes of paprika with a cupful of cream. Heat the cream. Add the beaten eggs to the other ingredients and cook carefully until thick, then add cream and set away to cool. When serving, add whipped cream.

Sliced oranges and bananas sweetened with strained honey make a delicious dessert or a fruit salad to serve with small cakes as a finish to the meal.

Nellie Maxwell

CURRENT WIT and HUMOR



Placing the Blame.

Bill—I see your friend has got a chauffeur now.
Gill—Yes, he has.
"But I thought he liked to drive his own car?"
"Well, he did, but he has had so much trouble with the thing that he just thought he'd like to have somebody to blame it on."

More Like It.

"Was your wife angry when you got home so late last night?"
"Angry? Why, she pelted me with flowers."
"But how did you get that black eye?"
"Well, she neglected to take the flowers out of the pots before she threw them."

Difference.

"Do you think it is proper to use profanity to a male?"
"So far as my own feelings are concerned," declared the expert lexicographer, "it is highly improper. But when you are trying to get along with a female, you're simply got to humor him."

The Reform Idea.

"Are you doing anything to economize on your pleasures?"
"Oh, yes; I've cut out my wife's matinee trips, and the children's movies."

HER IMAGINATION.



"Why does Daisy take off her wedding ring whenever she sits down to read a novel?"
"Because she enjoys reading one better if she can temporarily forget that she's married."

Seems So.
A lot of people screech about free speech. Sometimes free speech can be a bit too free.

Letters of Introduction.

"Does a letter of introduction mean anything to you?" asked the caller.
"More than it used to," replied Senator Sorghum. "Stationery and typists have become so scarce that a man is not so likely to waste time on letters of introduction in a spirit of mere idle compliment."

His Defusion.

She—What an atrocious necktie! I wouldn't trust you to select anything, you have so little taste.
He (chuckling)—You forget that I selected you, my dear.
She—You think you did, but you didn't really.

In the Natural Order.

"I hear the head of the firm declared he would put his foot down on any birthday present from his employees."
"That's exactly what he did do—put his foot down on it. You see, it happened to be a handsome office rug."

Not Necessary.

"Well, look at that man across the street taking off his hat to the woman he's parting from!"
"Why shouldn't he, if he's a gentleman?"
"But she's his wife."

How About It?

He—Darling, you're looking prettier every day.
She—Then why do you want to marry me so soon. Why not wait, if that's the case.

That Doesn't Follow.

"This man says he never takes his politics to bed with him."
"Then I suppose he has no use for political sheets?"

Quarer Contradiction.

"I tried to have this telegram charged, but they demanded cash."
"That's odd. I thought all telegraphic messages went on tick."