

GAS MEN PLAY A BIG PART IN WINNING WAR

Ten Thousand Soldiers Toil at Turning Out Shells to Rout Germans.

MANY ARE INJURED AT WORK

Edgewood Arsenal in Maryland Won Place of Leadership Over Allies in Scientific Progress and Deadliness of Output—Gas Factory City in Itself.

Baltimore, Md.—While the men who have been working in shipyards and munition plants have received just praise for their fulfillment of patriotic duty, there is an army of men 10,000 strong who have worked faithfully, carefully screened from public notice, performing some of the most important work of the war, work which was largely responsible for the early signing of the armistice, who have received no recognition at all.

Day after day they have secretly worked in the manufacture of the poisonous gases which routed the Huns and impressed upon the Germans the ingenuity and resourcefulness of the American brain.

These men of the Edgewood arsenal stayed on American soil, never had the excitement of an ocean voyage or adventure in a foreign country or the hero-worship of those who have been overseas, and yet while staying right in this country they ran greater risks than many of the men on the firing line.

300 at One Time in Hospital. The hospital at Edgewood is now occupied by 300 men who have been gassed or burned while about their country's work. There have been as great heroes at Edgewood as on the battlefield. There is in the hospital a blue-eyed boy in early manhood, smiling bravely through scars which are today as vivid as the first day, months ago, when they brought him, a writhing bit of humanity, to the hospital. Nor is he the only one. There are others, some of whom have been gassed twice and three and are today in the hospital in Colorado, having developed tuberculosis.

Hundreds of others are maimed and will always bear the marks of their sacrifice for Uncle Sam, which they gave so gladly without any of the glory, stripes, promotion or encouragement given to the men in the camps and trenches.

The signing of the armistice has made it possible for the public to have the first insight into the vast work which has been accomplished at the Edgewood arsenal, where has been manufactured and shipped safely "over there" more gas than has been made by England and France combined. Far removed from prying eyes, these thousands of men have produced gases which will go down in history as among the greatest achievements of the war.

Gas Factory a City in Itself. Where on October 24, 1917, stood a bare waste of forest, now stands what is a small manufacturing town and a city in its activities. Great chemical plants have risen with lightning rapidity. There are the chlorine, phosgene, chloral and mustard gas plants, and then down near the water the large filling plant where the big shells were filled with deadly poisons and sent on their errand of freeing humanity.

Edgewood arsenal covers a tract of 300 acres, adjoining its companion unit, the great Aberdeen proving grounds, where the biggest of the big guns were tried out that were designed to smash the strongest of German fortifications. At the arsenal these results, it was confidently predicted, would be more effectively secured, and certainly at smaller human cost, by the gas products which

it was confidently declared would smother the Metz forts.

Upon these 300 acres have been constructed a large number of immense chemical plants with the necessary adjuncts, all on an extensive scale, connected by 35 miles of railway, operated by United States army crews, working three shifts a day. At first it was attempted to run the arsenal with civilian labor, but the hazardous character of the employment made this class of employee so uncertain, although fancy wages were offered, that it became necessary to use enlisted men exclusively throughout the plant.

The result has been that work of a highly specialized nature and extra hazardous has been done by men receiving from \$80 a month up, and under rigorous military discipline.

The research laboratory work of the arsenal has been highly fruitful and the gases of the Germans are said to be mild in comparison with the more terrible products of Edgewood, of which the Germans had only got a foretaste when the armistice was signed.

"Come to Teach, Remain to Learn."

Two experts, Colonel Auld and Captain Hankar, one sent from England and the other from France, to aid in the establishment of toxic gas plants, said on leaving: "We came to teach, but we remain to learn."

The Central Construction corporation received a contract in October, 1917, for the construction of a gas shell filling plant at Edgewood, under the immediate supervision of Capt. (now Lieut. Col.) Edwin M. Chance, then connected with the ordnance department.

It soon became quite evident that more than one gas shell filling unit would be required. It was also apparent that experimental work necessarily had to be carried on in connection with construction on a somewhat elaborate scale in the first unit, both of which circumstances caused the pressure on the entire situation to be rapidly increased, hence the contractor's organization, as well as the military personnel, began to increase rapidly early in the present year, until at the height of its operation the construction corporation had approximately 6,000 men in its employ; new camp buildings and mess halls were constructed at top speed.

When we saved last winter we helped swell the amount needed for the making of chlorine, of which it is the foundation. This plant produced 100 tons of chlorine and 112 tons of fused caustic soda a day, making one of the largest single plants of its kind in the country. For the first time vis-

parallel was that both distinguished themselves as heroes almost at the same time. John was awarded the distinguished service cross and Thomas was cited for distinguished service.

But here the parallel ceases and begins to take opposite. Thomas John enlisted in San Francisco, and it was at the other side of the continent—Norfolk, Va.—that John enlisted. Thomas John was born in America and John in England. Thomas John was first sergeant of the Sixty-sixth company of marines and John was the first sergeant of the Seventy-seventh company.

It was in the marines' great fight at Belleau Wood that First Sergt. Thomas John McNulty won his fame and subsequent citation. He led his company of men in a daring charge across a field of poppies against Belleau Wood, whence German machine guns poured death into their midst. His grim shouts of encouragement cheered them on to victory until his voice was silenced by lead and he fell seriously wounded amid the blossoms.

But his was a hardhood that could not die by any sudden means. Upon his recovery he joined a replacement battalion and was in the heat of subsequent battles up to the time the armistice went into effect. He has a father, Patrick McNulty, living at No. 1013 Bennett street, Scranton, Pa.

Extraordinary Heroism. First Sergt. John McNulty was awarded his cross for extraordinary heroism in the fighting between Blanc-Mont and Saint Etienne. Under a heavy artillery and machine-gun fire that rolled forward with a German counter-attack he stuck by his machine gun. Every man of his gun crew was shot down beside him, but he stuck. Shot after shot burrowed its way into his vitals, but still he stuck to his machine gun with a tenacity that could only be broken with death and a regard that he did not have for his life. It was at a moment when it seemed that his iron power of will was soon to have no living body to direct that the German attack was beaten off, and First Sergt. McNulty laid his head on the ground exhausted. Even then he stuck by his gun, and it was only when ordered to the rear by his commanding officer that he finally retired. "He was an inspiring example to his men," according to memoranda in connection with his being awarded the distinguished service cross.

His mother is Mrs. Jane A. Wilson, who lives at No. 43 Dushwood street, Revere, Mass.

Silk Stockings Banished in Kansas Gymnasium.

Lawrence, Kan.—Silk stockings are a thing of the past in the women's gymnasium of Kansas here, the ban having been one of the first rules placed by the authorities recently. Hereafter all girls in the gym classes must wear cotton stockings. The new rule is made in the interest of uniformity, economy and democracy.

Itors—a party of business men—were allowed through the plant last week and they saw one of the commonest of table supplies, salt, being made into one of the most fatal poisons. This chlorine gas passes from 3,552 electrolytic cells, is dried by sulphuric acid and pumped to the chemical plants. Dry chlorine gas is bubbled into the common sulphur in tanks and becomes a basic raw material in the production of mustard gas, which was one of the deadliest weapons used to win the war.

Then there is the phosgene plant. Here coke is received by rail and burned by a common steam boiler. Pure oxygen, obtained from liquid air and carbon dioxide, are passed together through red-hot coke producing carbon monoxide. Dry chlorine gas and carbon monoxide are suitably mixed, and by passing over a catalyst, converted to form gaseous phosgene. The liquid phosgene is filled into one-ton containers for overseas shipment and was the gas most largely used in the war.

Chlorpogonin, one of the commonest war gases is another product of Edgewood and was produced at the rate of 30 tons a day.

Filling plants are another important feature of the arsenal. Here shells are received by rail and inspected. Phosgene, chlorpogonin and mustard gas are received from the chemical plant. Other war gases are obtained from outside plants by rail. The capacity of these plants is more than 125,000 containers a day. The ventilation is such that men in direct contact with the liquid gas are not required to wear masks. The filled shells are returned from filling machines and are classified by weight and stored one day as a test for leakage. They are then painted gray and striped, the numbers and colors of the stripes indicating the nature of the gas within the shell. Here the drums, whose range is approximately 1,700 yards, are filled with the fatal gases. The grenades are filled by hand with stannic chloride and are used especially in clearing dugouts. Others are filled with white phosphorus and are used in the production of smoke screens in connection with the concealment of troops.

M'NULTY'S DEEDS WIN THEM LASTING FAME

Washington.—What's in the name McNulty?

The encyclopedia is silent concerning its origin, but two marines of that name, who probably did not even know one another, had lives that were nearly parallel to one another, and both distinguished themselves as heroes on the battlefields of France. Which is indicative that the same fighting blood courses in the veins of these McNultys from an ancestry that was doubtlessly Irish.

Their names were nearly alike—Thomas John McNulty and John McNulty. They were both in the beginning of their forties—they were both in the marine corps—they were both first sergeants—and both had seen 19 years of service under the Stars and Stripes. Moreover, both fought in the same battles in France and both were seriously wounded. And the climactic result of this strange

parallel was that both distinguished themselves as heroes almost at the same time. John was awarded the distinguished service cross and Thomas was cited for distinguished service.

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WHERE ROOSEVELT SLEEPS HIS LAST SLEEP



This is Young's Memorial cemetery at Oyster Bay, N. Y., where the body of Theodore Roosevelt was interred after simple services. Inset is a portrait of Rev. Dr. George E. Talmadge, pastor of Christ Episcopal church, who conducted the ceremony.

WIPING OUT ALL TRACES OF WAR

Thrifty French Already Cleaning Up Battle Ground to Plant Grain.

TASK MOST DIFFICULT ONE

Removing of Barbed Wire Entanglements Is No Easy Matter—Narrow Gauge Railways Being Torn Up and Trenches Filled In.

Paris.—Eradication of all traces of the 52 months' war has already begun everywhere along the old stationary front which marked the line of the opposing armies since the inception of a war of position.

Barbed wire entanglements are being torn up, trenches are being filled in, camouflage is being taken down, narrow-gauge railways removed, and shell dumps and other depots for material being transported away.

This is the first time that any field fortifications have been permitted to be touched by the civilian population. Even after the Germans had been driven from the Chateau Thierry region south of the Marne to north of the Vesle, the military authorities refused to permit barbed wire to be taken up or earthworks filled in.

In most cases this work is being done by civilians, but everywhere with the release of the older classes of French soldiers and the numerous reformers—wounded discharged from the army—there are enough men familiar with field works to supervise the removal of them.

Difficult Work.

It is no easy matter for the novice to pull up barbed wire, and in places, particularly in the Juvigny region north of the Aisne, where the Thirty-second division fought with General Mangin's superb Tenth army and won for themselves the sobriquet of "The Tigers," the entanglements cover hundreds of acres; the belts being hundreds of yards in depth. This wire dates back from September, 1914, and is rusty and dangerous to handle, owing to the presence of tetanus microbes. The newer "giant German wire," the strands of which are a quarter of an inch thick and which bristle with barbs, is equally hard to remove.

The old wide trenches which were in vogue earlier in the war before the development of the mine-warfare as an accurate piece of ordnance, are hard to fill in, as their parapets have been washed away by rains and blasted to bits of shellfire. They are like great ditches, furrowing the earth in every direction. The newer, narrower trenches, shored with timber and provided with duckboard floors are easier to fill in. The thrifty French first pull out the shoring and let the rain act on the trenches for a couple of weeks in which time they infallibly fall in, then they shovel over the top, smoothing it off.

No attempts are made to fill in the dugouts, the entrances merely being boarded up and covered over. In many of these German dugouts there are infernal machines and man traps likely to explode when the first person enters. Loose boards on the stairs or bits of string stretched across the entrance set off explosives. In many other dugouts there are corpses of friends or foes, killed underground by bombs hurled down the exits.

All roads in the zone where the opposing armies have swayed back and forth are lined with fox holes, as the American doughboys call the tiny shelter caves they are taught to dig with bayonets and spade kits and which provide such wonderful shelter against shrapnel. Everywhere in the belt of terrain marking the extreme limits of the passage of the fighting troops there are endless rows of these fox holes dug into the ditches beside

the roads. They tell the silent tales of bodies of troops on the march spied out by enemy airplanes or captive balloons and caught under concentrated fire by many batteries. Then the men are ordered to take cover, and since there is none to take they must improvise their own shelter.

It is a remarkable sight to see how fast a soldier can dig a cave that will shelter his body with no implements but a bayonet and mess kit. They loosen the earth with the bayonet and scoop it out with the big, long-handled tin cup, sometimes working with the skill in the other hand.

Only light, Decauville railways are being taken up, all standard gauge lines which have been laid since the war remaining in position until such time as the administration determines what shall be done with them.

Few pieces of artillery remain in their emplacements, nearly all of those which were overlooked in capture during attacks having been dragged out

SYMPATHETIC TWINS SICK AT SAME TIME

Norway, Me.—Henry and Benjamin Hosmer of this town are twins. It has been their experience through life that when sickness overtakes one the other is stricken too. Recently Benjamin, who is a soldier in an army overseas, was taken to base hospital suffering from attack of Spanish influenza. Here at home at the same time Henry was also down with influenza.

of their pits and placed in the square of the nearest French village. But there are still hundreds of thousands of live shells, grenades and millions of rounds, small arms ammunition lying everywhere. The earth is pitted holes made by "duds" which explode the first time the farmer's strikes against them.

Despite that, however, the French are cleaning up their old preparing for the sowing of crop spring.

ONLY RICH DRINK

Maine Woodmen Now Have to Pay \$5 for Pint of Whisky.

Bangor, Me.—War, which used up so much alcohol and starved the distilleries, and the bone-dry law affecting the shipment of liquors from wet into dry territory, have made anything like warm sociability, let alone hilarity, impossible in Maine to any save the wealthy.

In the olden days a woodsman or a sailor went into a Bangor bar (and at

one time there were 181, the seven varieties to choose from down a dime and took a drink of could easily be identified as whisky.

But now a drink of whisky is a with Black Hand secrecy, and a wink and whisper of caution in dugout up an alley, or maybe in a dark hallway from the dirty of a bootlegger, and costs \$2 to \$4 while a half pint costs \$5 to \$8 pint \$4 to \$5, and a quart \$8 to \$10 according to quality, time and There seems to be plenty of or near whisky, here and elsewhere Maine, but the high cost of it has driven common folks out of market.

WINS SERVICE CROSS



'COUNT' ADMITS 'GOOD LO'

Declares Widow Who Charges Theft Made Love to Him.

New York.—Louis Altherby, as "Count" Cenk Bela, on trial, Judge Mulqueen in general charged with the larceny of \$10,000 from Mrs. Anna Gruich, a New J. widow, who asserts he through a fake wedding ceremony, denies all her charges.

Mrs. Gruich testified the "made ardent love to her. The swore she made the same love to him, unsought. She believed he was single. He she knew all the time he was and "went up in the air" with threatened to leave her.

The "count" added that she infatuated with him on account what he admitted to be his looks; that she gave him presents, in amounts of \$100 to \$200 a week, the money he is alleged taken from her; that she invited to Newark and offered to start business and threatened him with refused.

MAN MISSING MANY

Found Wandering About Boston tim of Aphasia, He Is Identified by Family.

Boston.—An aged man was wandering in the South end in He was a victim of aphasia, having lost the power of language. He was identified by the family. The man was described as being about 70 years of age, of medium build, with white hair, and wearing a dark suit. He was found wandering about the streets of Boston, and his family was alerted by a neighbor who recognized him. The man was brought home and is now being cared for by his family.

PRESIDENT WILSON AND MME. POINCARE



President Wilson and Mme. Poincare, wife of the French president, heading a procession leaving the railway station at Paris. President Poincare is shown behind President Wilson with Mrs. Wilson.