

# EXPERTS REBUILD ARMY DEFECTIVES

### Round Shouldered Rookie Given New Zest in Life.

## SEEMING MIRACLES ARE DONE

### Orthopedic Division at Camp Dix Is Saving Many Men Otherwise Unfit—Crooked Spines, Flat Feet and Various Joint Defects Are Remedied—Physical and Mental Wracks Built Up.

He came to the big training camp at Wrightstown, N. J., in a recent draft from a rural district in New York state. How the home board came to accept him is a mystery, for he was so round-shouldered that the two of them had to hold him up. He had a few months further the camp, examining board would have sent him back past-his-time, but under the new ruling which permits the army to salvage from this kind of man, he was called forth by the draft much of the material that was formerly stamped "unfit" was accepted.

For several days he drilled with his company in the drill field. At least he tried to drill, but nothing could get him to straighten up and throw back his shoulders. To make matters worse his feet went "bad" and finally he could scarcely hobble about. Then he was sent to the base hospital where he became a patient in the new orthopedic department.

### Experts Take Charge.

Experts looked over his bent form and set to work. They massaged his back and even "baked" it under an electric heater. They compelled him to undergo exercises until he winced at the pain of muscles and tendons which had been useless for years. The crooked spine became supple. With a supreme effort he could straighten his back while in bed, but when he sat up or walked he slumped in the same old stoop-shouldered posture.

"It's no use, I can't do it," he pleaded when a physical director told him to straighten up and go through the exercises, and apparently he could not. But the experts of this new department had still another card to play. They began to teach him self-confidence, and in a week had proved to his own satisfaction that he could straighten those shoulders.

He is now fit for a camp job, but for a first-line unit. The orthopedic experts actually inverted the hump on his back and made it bulge out his chest. He carries his head erect, his shoulders thrown back, and he now walks with a confident, easy stride, for they have strengthened the arches of his feet and have given him special shoes to correct any threatening defects.

Miraculous as has been the physical change it is surpassed by his improved mental condition. He was inclined to be dull, listless, and careless. The straightening of his body seems to have given him a better, brighter outlook on life, and there is snap even in his conversation. The doctors have made a better citizen as well as a good soldier.

### "Puts a Man On His Feet"

The story of this young farmer is one of many cases in which wonderful results have been obtained in this new branch of the army hospital service. Like many of the other projects planned for the new armistice of the United States, Camp Dix has been made the experimental center for this science, which aims to "put a man on his feet again."

The orthopedic treatment does not stop with the correction of foot defects. It applies to joints in any part of the body. A rheumatic knee, a stiff shoulder, a dislocated vertebra, all come under the ministrations of this science, which is the field covered by Lieut. Col. W. Cole Davis, commandant of the base hospital, has about 1,500 wards for patients of the orthopedic department, and already they are filled.

The work of the new department is under the personal direction of Captain Rolland Meisenbach of Buffalo, and the manner in which he has made the lame walk and performed other seeming miracles has convinced war department officials that this new science can be made one of the most important factors in the general scheme of rehabilitation of human bodies. Dr. Meisenbach's chief assistant is Lieutenant M. A. Rimmer of Pittsburgh.

Experts have estimated that as many as 65 per cent of negroes and 40 per cent of whites called in the draft have foot defects of one kind or another, and a large number become acute under the stress of continued marching. A year ago the "flat-footed" recruit was rejected. Today he is accepted, and eventually finds in the orthopedic hospital for a course of treatment that it would be almost impossible for him to get in civil life. One of the patients most recently discharged as cured was the son of a wealthy physician, who had been unable to obtain for his boy the special treatment which he received here.

### Build Up "Broken" Arches.

So-called broken arches are built up by massage, various prescribed exercises, development of self-confidence, and, last but not least, the equipment of the patient with shoes specially built to overcome the defects from which he is suffering. A special cobbler's shop has been opened in the

main ward. Former coddlers among the patients sent to the hospital are now doing the work, and incidentally are learning a branch of their trade which will enable them to demand higher wages when they return to civil service.

Captain Meisenbach and his assistants render another important service to the army in that they can quickly spot the man who may be "stalling" in the hope of getting out of the service. A few of the fists they have devised will quickly make the fakes "conquer hands." At the same time they discover many instances of real disability which might have aroused the suspicion of officers.

A New Jersey recruit, a heavy set man who had been a hotel keeper while drifting on the field with his company, suddenly sat down on the ground. His astonished officer shouted an order but the recruit did not arise.

He sat there for some time, his eyes fixed on his feet. He was "stalled" when he tried to take another step. His company grumbled when he was sent to the hospital in an ambulance, for they regarded him as a "stuffer," but the surgeons found he was suffering from a real but rare ailment. For days he could get about the ward only on all fours. Under an elaborate treatment he is again learning to walk, and while he may never be fit for first-line service he can do camp chores that will release some able-bodied man for a true recruit.

Several recruits were found strong enough physically, but unfit for military duty because of web fingers. The orthopedic surgeons operated to correct this deformity, and these men have gone back to their regiments with freedom. In another case where external callus on each foot prevented a negro recruit from wearing shoes and extra fingers annoyed him in handling a gun, the surgeons obligingly took off the extra digits.

## OLD MOUNT IN FRANCE

### Major Now Bestrides Horse He Rode on Mexican Border.

Major Curtis G. Rodden, with the One Hundred Forty-ninth Artillery Regiment in France, has written relatives at Danville, Va., that he has just received his saddle horse which he had two years ago on the Mexican border.

When the Rainbow division sailed for France the horses belonging to the Danville battery were left at Newport News, Va. In care of a detail of men from the battery. Only a short time ago the animals were sent across. The men arrived at the landing place, and the sergeant in charge hurried to get into communication with Major Rodden.

The latter was somewhere on the American front but the soldier kept trying until he was able to find him and then reported that the long-looked-for horses were in France, ready for action and that among them was the one ridden by the major in Texas. It had been returned to Danville, kept there until the battery was called to the colors again and then sent to Newport News.

## RED CROSS ENTHUSIASM

### Whole Family of 15 Enlisted in the Organization.

Tom Bradshaw of Eureka Springs, Ark., not only is running a good race in the competition open to large families, but he is very near the top as one of the most patriotic fathers in Carroll county.

He and Mrs. Bradshaw are the father and mother of 15 robust young Americans, and they find it keeps them pretty busy scratching for such a flock. By way of diversion, Father and Mother Bradshaw and all 15 of the little Bradshaws drove over to attend a Red Cross gathering which was held there by Judge A. F. Kammery of Green Forest. The Bradshaw crew so impressed the Red Cross that they enrolled the entire Bradshaw family in all its members of the organization.

## AIRMAN KILLS WOLF

### Did It With Landing Gear on Machine and Added New Sport.

A new sport has been added to the card in West Texas. Harmon Norton, civilian instructor at Call Field, killed a wolf with the landing gear of his Curtiss biplane. Norton and a cadet flyer were doing stunts flying south of Lake Wichita.

Flying close to the ground they floated two coyotes following the machine. Thinking to scare them off, Norton dipped down over them. One ran, but the other stood its ground, snarling and showing evidence of fight, jumping up at the machine. Norton again drove the machine down and this time struck the prairie wolf with a wheel, killing it.

## French Need Work Animals.

French farmers are sadly in need of work animals for the farms and are not entirely satisfied with the way the government has been seizing horses for the army's needs. M. Andre Jument, deputy from the Oise, with several of his colleagues, has demanded a parliamentary investigation into the army's methods.

## Makes Unusual Sacrifice.

Miss Margaret Cockett, a Y. M. C. C. canton-worker in France, cut her hair short because her work left her no time to care for it properly.

## SHARK, DOGFISH AND CARP USED FOR FOOD

### Even Whale Is Eaten by Americans During War Time, Says Bulletin.

One of the most curious anomalies of the present war, which has been called the greatest destroyer in the world's history, has been the addition of many thousands of dollars to the national wealth of the United States through the utilization of fish foods which were thrown away as worthless until necessity demanded their conservation.

The radical change which has been wrought by the war in the fishing industry is reflected in the fisheries of the United States. Instead of being confined solely to items concerning salmon, trout, and other fishes which have had a ready sale, the bulletin devotes much space also to news concerning the catch of pole, flounder, sharks, rays, slates, carp, grasshopper (dogfish) and other types of water food. Regarding the pole flounder or gray sole, the bulletin records that it was virtually unknown as food prior to the fall of 1916.

As a result of the bureau's food conservation campaign which bought the value of the domestic and attractive ways to prepare it, demand for the fish increased until last season there were thirty boats taking flounders to the New England markets, and probably 2,000,000 pounds have been marketed. Carp abound in the interior lakes. An agent of the bureau was sent to St. Louis, Kansas City, Omaha, Minneapolis, St. Paul, Milwaukee, Chicago and Indianapolis, to stimulate the use of fish. A bulletin containing recipes for cooking carp was prepared. State commissions of Minnesota, Wisconsin and Indiana co-operated in the work. The result was a greatly increased demand for carp, which continued to grow in favor as the public became acquainted with its value. More than 1,300,000 pounds of carp were sold from Minnesota lakes, and in Milwaukee the weekly consumption has reached 25,000 pounds.

On the Pacific coast there is a growing demand for sharks, rays and whales. Sharks sell for 10 to 12 cents a pound. It is said to be especially delicious when salted or smoked. Numerous canneries have undertaken to preserve the meat.

## CHASED BY BEAR

### Mother Animal Was Angry When Cub Was Kidnaped.

To be chased across a pasture by a mother bear that was trying to get close enough to his fleeing horse to avenge the kidnaping of her baby was the experience of Hardy Bingham, who came to Meridian, Idaho, recently from his home six miles northwest of the town to exhibit the cub as evidence of the thrilling episode which took place in Long valley, where he was herding cattle.

The cub, which was less than a month old, was playing about 300 feet from its mother when Bingham and a companion rode into sight. Immediately he began to run toward his mother, but Bingham got off his horse and gathered him up before he could get away. He protested his capture by bawling at the top of his voice and by trying to bite Bingham's hand with his toothless gums. With a roar the mother bear came to rescue her baby, and Bingham and his companion were compelled to ride at top speed to escape her.

## GREATEST MOTHER IN THE WORLD



Miss Almee Smith of Washington, D. C., was selected by the Red Cross as the most attractive young woman to pose for the famous poster used in the second war fund drive. She is shown in this beautiful portrait posing as she did for the poster, "The Greatest Mother in the World."

## Dog Has Glass Eye.

In a round-up of unlicensed dogs, Chief of Police Jacob Maurer of Dover effected the capture of one dog, a yellow pointer, with little difficulty. It was found that the dog had a glass eye and that the chief had approached him from the blind side.

## CHASING U-BOATS AN EXCITING GAME

### Perilous Work of British and American Destroyers.

## SHOWN BY OFFICIAL RECORDS

### Landsman May Get Some Idea of the Grim Game From Details of Few Encounters Officially Reported—Thrilling Story of Rescue of Crew From Burning Oil Ship by British Destroyer.

The destruction of a German submarine is never announced by the British admiralty except upon the strongest possible evidence, which is often provided by the destroyers that are engaged in a long game of hide and seek with the elusive U-boats under conditions of varying excitement. The landsman may obtain some idea of this grim game from the details of official records of a few encounters as to the result of which there is no room for doubt.

A convoy of merchant vessels was being escorted by British and American destroyers. A submarine attempted to attack the convoy, but although it maneuvered from one position to another, the destroyers were too quick for it, and every time it attempted to come to the surface its presence was detected.

Finally an American destroyer sighted the periscope in a favorable position and headed for it, with the intention of ramming. A depth charge was dropped directly over the U-boat, which was still visible under water from the American ship. The result was an upheaval of black-colored water, two broken pieces of spar and some small pieces of wreckage. Nothing more of the enemy was seen.

Early one winter day a destroyer sighted an enemy submarine on the surface and steered for it at full speed. So swiftly was the maneuver carried out that the German had no time to submerge. Within thirty seconds of sighting the destroyer had rammed the enemy, tearing a great rent in the hull of the U-boat. At the same time a bomb, "which," said the commanding officer, "exploded satisfactorily," was dropped. After this the destroyer wheeled back over the spot and dropped another bomb. Large quantities of oil rose to the surface, but no other sign of the enemy's presence could be detected, and when the position was swept later the submarine was located, still lying on the spot where she had sunk.

## Submarine Cut in Two.

A merchantman which had fallen behind the main body of the convoy to which she belonged was escorted back to her position by a destroyer. Just then another of the merchantmen was torpedoed. Immediately the destroyer swung around and headed full tilt for the enemy's position. As she passed over the spot a severe shock was felt throughout the destroyer, and just afterward the German's periscope was sighted by the destroyer's sister ship, which hastened to drop a bomb on the U-boat. A heavy explosion resulted, and the submarine came up right astern of her pursuers. Helm was put hard over and fire opened by both British ships, three hits being registered in quick succession. Escort No. 2 had now come round, and being nearest the enemy, went straight for him and succeeded in cutting the submarine clean in half. Both halves appeared on the surface for a few seconds before plunging finally from view.

A destroyer hunting for submarines observed two periscopes about eight feet apart on her starboard bow. The destroyer managed to get within 50 yards before the U-boat submerged; then a depth charge was dropped over the submarine's course. After the explosion of the charge a second and even louder explosion was heard and felt by everyone on board the destroyer, and a column of black colored water was thrown to a height of about 200 feet. A film of light oil then spread over the water, and in the next two hours had increased to a considerable extent.

Sighting the wake of a submarine, a destroyer dropped a depth charge and oil rose to the surface. Later a periscope appeared. Another depth charge was dropped, and more oil was seen. When darkness fell a large and conspicuous patch of oil was observed, and was still very clearly marked next morning. Another depth charge was dropped in the middle of the patch, whereupon more oil and bubbles rose and continued rising for the next two hours. Sweeping operations were then undertaken, and an obstruction was located on the bottom. More oil rose to the surface.

## Rescued From Burning Ship.

A lieutenant in command of a destroyer discovered that a British oiler had been torpedoed and set on fire. She was burning furiously and was under control, although her engines were still running. A continuous stream of oil fed the flames, which prevented anyone from entering the engine room. Her peak was not yet alight, and crunched up there were thirty Chinamen, the remainder of the crew. To extinguish the fire was beyond the power of the destroyer's crew, but her captain determined to make an attempt to rescue the survivors in the peak, although it was obviously a difficult undertaking. He ran his vessel "laser past the oiler's stem, and as she

passed ruffs, life-boats and life buoys were pitched overboard. This maneuver was carried out three times.

By now all the destroyer's boats had been lowered to pick up the men in the water, while all her available hoist life-saving gear had been thrown overboard. However, there still remained nine men in the peak of the oiler. The concluding part of the operation may be explained in the words of the destroyer's captain.

"I therefore decided it was necessary to place myself alongside the ship and take off the remainder of the crew. A speed of eight knots being maintained, this was done. We remained alongside locked to the steamer's windward bow for a period sufficient for all the men to lower themselves on board the ship, which sustained slight superficial damage to guard rails and upper deck fittings. Ten minutes after we cleared the steamer she was burnt to the water line."

## ARMY-SURGEON IS AN UNSUNG HERO

### Shows Bravery in Unpleasant Tasks and Without Romantic Stimulus.

One of the unsung heroes of the war is the military surgeon. No man has been harder worked in the tremendous fighting of the last few weeks, and his work has been in most cases far from pleasant.

There is not the same romantic stimulus for the medical man that there is for the infantry or artillery officer. It is one thing to dash about about under fire and take the same risks while calmly attending to the wounds from which all other men as they pass avert their heads. "Thank God, I am not a doctor," said an officer who had been detailed to inspect a number of improvised casualty clearing stations along the front during a recent attack.

The regimental surgeon in the British army has in his charge the wellbeing of more than 1,000 men. When there is no fighting on, he has plenty to do. He has to strike a happy medium in discouraging the faint-hearted, who come up to him as a means of obtaining a fortnight's rest, and in holding out a helping hand to those who are in real distress. If he is too lenient, the commanding officer begins to ask whether he intends to deplete the whole regiment; if he is too harsh the junior officers and men lose patience.

The doctor doesn't ride, but "foot-slogs" it with his regiment through the same mud, the same wind and rain, and the same perils. His duties are not confined to caring for the ill and injured. He must supervise the sanitation of camps and billets, insure the purity of drinking water, keep a lookout for outbreaks and epidemics, maintain a continuous campaign of inoculations and vaccinations, and fill out a long series of records and army forms. He has to do his utmost in the light of his special knowledge to maintain the health of his unit, and any femissness on his part may lead to a serious diminution in its strength.

In billets he has the added duty of playing the role of medical doctor to the villagers, as all the French doctors in the country districts have gone.

## HUNS GAS BRITISH WOMEN AT FRONT



These two British women are now in a London hospital recovering from the effects of being gassed by the Germans. They had gas masks, as this British official photograph shows, but not time to don them when a gas shell burst in their dugout.

Known as the "Women of Parvyse," these two ambulance drivers lived at Parvyse but 500 yards from the German lines until they were sent to "Blichly" after being gassed.

## Whisky in Coffin.

A coffin supposed to contain a corpse was seized at Huron, S. D., recently, and when opened was found to contain 20 gallons of whisky. The bootlegger had ordered a grave dug at Huron cemetery. The coffin had been shipped to Huron from the East.

## BRITISH LEARN SECRET OF DYE

### Build Industry to Relieve Dependence on Germany.

## MANY CHEMISTS ENGAGED

### Plant Springs From Little Factory to One of Big Proportions—Master Problem of Cheap Production of "Intermediate" Products, Which Is Key to Profitable Production of Dyes, Results Savor of Magic.

In a secluded Yorkshire valley is being fought one of the grimmest and most far-reaching battles of the war. It is the preliminary bombardment of the great commercial war after the war. For here are situated the works of the British Dyes company, which is struggling with Germany for one of the most vital industries of the modern commercial world, that of the dye. The works of the British Dyes undertaking are typical of the evolution of the new industry and the new idea. Sprawling the length of a scarred and smokestreaked Yorkshire valley, the sheds, boiler plants and serried rows of retorts occupy acre after acre of ground. Sunk in the background, in a tiny cobbled street, a little factory that struggled for years against swelling German competitors, has tucked on either side and behind it a phalanx of raw red brick buildings. Stretching far along the valley, absorbing green fields and coppices, fed by miles of light railway and drained by 13 miles of sewers, are the great new sheds.

Many years ago an English chemist discovered that artificial dyes could be made by substituting coal tar for various chemical processes. On that discovery a great industry responsible today for almost every atom of color in our clothes, our books, our pictures and our household goods has been built. Germany was the first to realize the value of such an invention. Every possible inducement was put in the way of intending manufacturers and all German firms engaged in the new industry were subsidized by the government.

## British Progress Rapid.

What took Germany over thirty years to accomplish with laborious research cannot of course be achieved by British chemists in a year or two, but surprising and gratifying progress has been made. The cheap production of the "intermediate" products, without which the finer products cannot be made profitably, is guaranteed. Patience and perseverance are expected to win further success.

It is essentially a key industry. The problem the British works attack is not that of providing this or that dye or discovering the secret of one or another obscure German patent, but that of establishing an industry which can stand on its own bottom and which is not to be upset by the withdrawal on the part of a foreign competitor of any essential substance used in the manufacture.

In this valley the gospel of thoroughness has not been preached in vain. In building after building there goes on a silent, almost automatic, series of operations that prepare the raw material and produce the intermediates.

## Results Savor of Magic.

In the laboratories a chemist performed two or three little pieces of magic with colorless liquids from glass stoppered bottles—these seething into brilliant color before one's eyes. The magic that one meets in the factories is less visibly impressive. There is a sufficiently arresting sequence of smells to be encountered in a walk through the works, but a surprising absence of color.

There were remarkable experiments with new-found secrets in acid, basic, mordant, sulphur, union and vat colors, all of which are being marketed by British Dyes. Through three miles of works one passed to the intermediate and auxiliary service plants, to examine the costly equipment of the oleum and nitric acid installations and ascend among boiling greens; samples, it seems, of a thousand different odors varying from the hot vinegar variety to the scents of Araby, to see the new discovery, chloranthene blue, the first of a series which has been followed by chloranthene blue 9 D and chloranthene yellow D; and on into the alizarine delphinol factories, where acid dyestuff for wool and silk, with extraordinary properties in bright shades of fast blues, are now produced and sold under distinctive brands B and E E, and pass through mountains of crude chemicals.

This leads to the last point—the research and chemical laboratory. It has a hundred chemists and more and has made a great beginning in guaranteeing the cheap production of "intermediate" products.

## Aged Woman's War Garden.

Mrs. Marie Crawford, age eighty-four, of Kokomo, Ind., is cultivating a war garden—and that means she is doing the work herself. She began by spading up the onion beds, and in explaining it, said that it was no special feat of strength. "I am not stiff with age yet," she says. "I walk a mile every fair Sunday to church." Mrs. Crawford is very proud of her war garden, and considers it her patriotic duty to help increase the country's food supply. Her husband was a soldier in the Civil war.