

ARTILLERY HORSES GET A QUICK DRINK



Official photograph taken during the British drive in France, showing artillery horses drinking from a trough.

DARING DEEDS PERFORMED BY KNIGHTS OF AIR

Feats of British Aviators in Somme Campaign Related by Correspondent.

GREAT HELP TO ARTILLERY

Flying Men, Ringed by White Puff Clouds of Exploding Shells, Direct Deadly Fire Upon German Positions.

London.—Mr. Philip Gibbs, a correspondent with the British armies in the field, sends to the Daily Chronicle an interesting article dealing with the British aviators in the air and their vital relation to the operations of the Somme. He writes:

"All through the battle of Picardy our air force has been glancing up into the sky to see the enemy's lines from day to day and looking for a Prussian aeroplane. It is a rare bird."

"Now and again when our flying men are not out because the clouds are lying low and it is a 'dud day' as they call it, a hostile machine sneaks through the mist and drops a few bombs and goes full speed back again, and more often, but not very often, a flight of Prussians will come in a gang behind a clear sky and attack one or more of our scouts if they can be sure of having all the odds in their favor. Behind their own lines they are more bold (and there is nothing wrong with their courage as individual fighters), and lie in wait in the crossroads of the air like modern Black Knights (with the Iron Cross as their badge) to defend their territory from all intruders—not, however, with any great success and to provide exciting combats for our own knights afloat. But across our lines they venture rarely."

"During the first week of the battle, which began on July 1, the hostile machines were invisible, and yet during all this time of fighting we cannot go up to the lines without seeing our own aeroplanes flying above the shell fire in Prussian territory."

"The 'Archies' are firing at them, ringing them round with white puff clouds, which burst very close, so close that one holds one's breath or speaks a whisper—'They've got him'—until a second later one can see the aeroplane skimming onward steadily and quite careless of these explosions which follow on the trail of his wings. Below these flying men of ours shells are crashing and smoke is vomiting up, and villages are burning, and there is all the tumult of battle, but they circle round as aloof as the winged gods themselves. It seems, from all this earthly strife—yet not aloof, because they help to direct the thunderbolts, as some of the old gods did."

"So far from prowling on our side of the lines, these pilots and observers make a daily habit of going far into the enemy's zone, often as far as Espinasse, which is a dozen miles beyond our own trenches, and to places like Martinpuich and Courcelles and Fleris. A few days ago they set Martinpuich on fire, and it was still burning when they flew over it again next day."

"On July 28 four of our aeroplanes paid a surprise call on Mons, the scene of our earliest fighting two years ago, and reminded the enemy of our 'contemptible little army' of those days by flying low and dropping bombs on the rolling stock in the railway station and upon sheds full of munitions. They were leisurely in their circling, and stayed until they had exploded at four different points and much ammunition had been blown up. They came home to dinner."

"Every day and all day long they are out and about, across the Prussian lines, observing for our artillery and directing the fire of our guns upon the enemy's batteries and other targets which they have seen below with their eyes."

"A good whipping was what I needed to get me right. You sent me out to get a switch and I never came back. I have never felt right about that and I am back now to take the switching."

"Professor Cone agreed to let bygones be bygones and he and his one-time pupil shook hands and went off together."

"Autolais complain that the roads are in a lamentable condition east of the municipal pier."

"The colored graduate of Harvard would not seek mental labor any more than the white graduate would, although the infamous American color prejudice often compels him to accept an inferior job in order to earn an honest living."

"A stopper for kitchen sinks so attached to the strainer plate over the outlet that it always will be found when needed, has been patented."

"Natives of the interior of China hatch both hen and duck eggs by burying them in lukewarm rice, which is reheated daily."

"With but little deviation from the popular American game, baseball is played in Russia, but there it is known as lutka."

"Arthur H. Franke, of Manitowish, Wis., heard about the people who could not get seats in the New York subway. He has patented a canopy that unfolds into a stool."

"Next to the United States, Germany has the greatest number of telegraph offices and the largest line mileage among nations."

"Michigan stands first among the states for the production of salt, ranked second for iron, and third for copper."

"Japan is rapidly increasing the production of its zinc mines and the development of the zinc-ironing industry."

"The first time Donald Walter, age nine, of Wolfboro, N. H., fired a gun he killed a 10-pound hedgehog."

"Two million children between the ages of ten and fifteen are employed for wages in the United States."

"Who inventors have been especially abundant among British servants."

"This work, so unobtrusive and so carefully done, has given us an industrial mastery of observation, which the enemy no longer holds. The Prussian planes now have to shoot mostly by the gun, and although they are very wise in so doing, it is not the same thing as being able to direct their fire by direct observation of results. Our airmen have been of use to us in the daily battle of guns, and it is largely due to their flights that our artillery has been able to destroy many of the enemy's batteries."

"One day our own batteries reported active in one machine were all silenced in ten minutes and direct hits were made on five or more batteries."

"On July 28 one of our air squadrons carried nine direct hits on the enemy's batteries."

"These things all, the knocking out of an opposing battery means less loss of life to our infantry and a greater certainty of progress, it is the hardest blow that can be given, for this is a battle of guns and every battery destroyed is better than the making of a trench or of a mine the easiest way to take it."

"A machine of our own kind mounted on a battery of two 5.9 howitzers, which were destroyed, and another machine directed guns on another battery, destroying one emplacement and causing explosions which lasted all night."

"So the aeroplanes from day to day, and the enemy is getting frightened for his guns and withdrawing some of them at least to safer places."

"The fearlessness of our men is not a virtue with them. It is a natural instinct. They attack menial odds with the gusto of schoolboys who fling themselves into a football scrimmage."

"Laterally, the enemy is put to flight by these modern men of ours, as when the other day one of our pilots shot at five hostile machines attacking one of our scouts and drove them off, and as when, a day or two ago, two others attacked four Prussians—the 'deadly Fokkers' as it used to be called—and drove them down into their own lines."

"They are a new type of men, these pilots and observers of the Royal Flying Corps. It is difficult to place them or to account for them. They seem to have been born to fly. For the most part they are very young men—boys of nineteen or twenty—though older men, twice their age and more, are found here and there, having come out of professional life the law and the civil service and taken to the air like ducks to water, but supplied with themselves. The younger men are clean cut, fine and delicately made fellows, as far as I know them, rather highly strung and nervous in temperament."

"'Fight the Music of Life.' It is quite curious that many of them are men of great musical talent. In one squadron I know there are nearly 20 men who are all very full of musical talent. One of them, a strapping, came out of the trenches to volunteer as an airman, with long streams of music which he had written down 'out of his head,' as children say, without hearing a note of it played until it came back. At night, when dusk creeps through the sky, and one by one the honing birds fly down (there is always an anxious question about the squadron commander, who is the best beloved), the flying men settle round the piano in the aerodrome, and one of them brings out his violin and plays it with a master touch, and another sings in a bass voice that may be heard one day at Covent Garden, and through the evening the men take turns at the piano, to play what comes into their heads and out of their hearts."

"This link between music and flight may be a coincidence in the case of one squadron (though I have heard of it elsewhere), but it may be that flight is the new music of life, and that the imagination of the younger generation is soaring upon real wings, inspired by flight to the deep chords of emotion that in earlier days went into sound and color. The pity is that just now they are instruments of death."

"They have amazing adventures up there in the sky and learn strange things. They learn the look of the great country below, so that every landmark is familiar to them, and any strange flash or shape is detected at once, and those things they must learn in three different scales of light, morning, afternoon and evening, because at each of those times the landscape and

the birds and shadows of it are quite different."

"They fly above the bursting shells and the hum of the machine guns, and sometimes they hear the humming of their engine as a great song in their ears."

"But they are not the Archies, who make the puff clouds above them, and sometimes they hear the scream of great shells going by them. A friend of mine had a most frightful case of this sort one day."

"He was flying fairly low when he saw coming straight for him three numbers of a sort of metal, in the shape of a shell, and heard its whining note and was roused as though in a rough sea by the rush of the wind it made. It was a shell from one of our French batteries, and this pilot who had been in his way within 100 yards was annihilated for the moment with the gunners below who had not worried about the bird in the sky, which was in ground."

"They are, however, keen, sensitive men, these aeroplanes of ours, and though some of them are very nervous they do not flinch other jobs of life, like a diver in some deep diving place behind the lines when a 'dud day' comes flying off. And for some of us, of the air it is better than a banquet to see these flying men and to hear them building castles in the air and telling tales more wonderful than those of fairy lore."

"During the year the department of labor in pursuance of co-operative arrangements with the department of commerce, utilized its employment service by establishing registers of certified seamen. Through the operation of this service the employment officers of the department of labor were frequently able to secure for merchant vessels a sufficient number of certified seamen to complete the crews; and when unable to do this they ascertained and reported the fact that no such seamen were available in their respective ports."

"The department upon the same day has a difficult task in front of him. For he has to devise methods of keeping the broken portions of the law in correct position, correctly spaced from one another, until such time as nature is about to bridge the gap, and all the time he has to work against the tendency of the month to infect his work and ruin it."

"But the problem can be solved, and it is being solved. The work of the Americans at the Lyons Pasteur and of the French have proved this, and if further proof be needed the exhibition of plates and dentures at present being held here at the Royal Society of Medicine furnishes it. The plates from Paris and elsewhere of men before and after treatment are eloquent testimony."

"Records, including finger prints, of all men enlisted in the marine corps are kept at headquarters for purposes of identification, and there are cases on record where bodies, with finger tips intact, have been positively identified through the finger-print medium."

"To extend the use of American railway equipment and supplies in the far East, Australia and South Africa, Uncle Sam will send a special agent to that part of the world to investigate the field for American products of that character. The investigation will be made by Frank Rhea of the division of valuations of the interstate commerce commission."

"Mr. Rhea will make a careful study on the ground of the conditions as they affect railway construction, equipment, traffic, the probable extension or reconstruction of railways, tramways, etc. While all specific opportunities for securing orders will be promptly reported, the real purpose of the investigation is to gather together the fundamental facts and conditions that will enable the American manufacturer to consider intelligently the different fields and to determine whether it is to his advantage to enter any of them."

"Big Rattlesnake Killed. Tifton, Ga.—The largest rattlesnake seen in this part of the state has been shown in Tifton by Dr. M. F. Welch of Chula. It measured seven feet and six inches, and had 12 rattles and a button. Dr. Welch shot it after it had frightened two small boys out of a cotton patch."

"Political Race for Legless Men. Zanesville, O.—Three men, possessing a total of four legs, were nominated as the Republican candidates for county commissioners."

WEST GETS BIG SHARE LAND NOT ALL TAXED

Awarded Large Sums for Roads in National Forests.

Allegation of Million Dollars to Be Spent by Uncle Sam This Year Gives California \$14,760.

California will get the largest share of the \$10,000,000 appropriated by Uncle Sam through the federal aid road act for the construction and maintenance of roads and trails within or partly within national forests. The tentative allotment among the national forest states of the million dollars to be expended this fiscal year gives California \$14,760.

The tentative allotments to the principal national forest states are as follows: Alaska, \$41,280; Arizona, \$20,700; Arkansas, \$11,280; California, \$14,760; Colorado, \$12,240; Idaho, \$10,800; Montana, \$12,240; Nevada, \$12,240; New Mexico, \$12,240; Oregon, \$12,240; South Dakota, \$11,280; Utah, \$12,240; Washington, \$11,280; Wyoming, \$12,240. In addition, a total of \$2,000,000 has been tentatively assigned to Florida, Michigan, Minnesota, Nebraska, North Dakota and Oklahoma, while the eastern states, Maine, New Hampshire, Virginia, West Virginia, North Carolina, South Carolina, Tennessee and Georgia—in which the government is purchasing lands for national forests, have been allotted \$21,000.

"In general," said Secretary of Agriculture Houston, "the states and counties will be required to furnish co-operation in an amount at least equal to 50 per cent of the estimated cost of the surveys and construction. However, upon a satisfactory showing by the applicant state or county that such proportion of co-operation is inequitable, it may be altered and the ratio of co-operation fixed upon a basis equitable to both the state or county and the United States."

The method followed in apportioning the money was explained by Secretary Houston as follows: Ten per cent of the amount available each year will be withheld as a contingent fund. One-half of the remainder will be allotted to the states in amounts which will be based on the area of national forest lands in each state. The other half will be apportioned on a basis of estimated value of timber and forage resources which the forests contain. Amounts apportioned but unexpended within three years, and any balance of the contingent fund which remains unexpended at the end of each year, will be reapportioned on the same basis as the original allotments.

Missouri reports the least area of vacant land, having but 952 acres, which are scattered over 13 counties. In 32 counties of Michigan may be found 30,540 acres, while 30 counties in Wisconsin report 5,372 acres.

Of the Pacific states, California has 20,025,089 acres of vacant land; Oregon, 15,237,309, and Washington, 1,122,571.

The land in the Dakotas is rapidly passing into private ownership, only 2,282,289 acres of vacant land being reported in South Dakota, and 31,126 acres in North Dakota.

Of the northwestern states, Idaho contains 15,510,581 acres of vacant land, of which 4,870,071 acres are unsurveyed; Montana, 16,449,725 acres with 7,420,571 unsurveyed; and Wyoming, 28,229,492 acres with 1,960,752 acres unsurveyed.

In Colorado over two and a quarter million acres were appropriated during the last fiscal year, leaving 14,908,127 acres now vacant. Of this area over 4,000,000 acres are unsurveyed.

The total area of unappropriated land, surveyed and unsurveyed, in the 25 public-land states, is reported as follows:

Table listing states and their respective acreages of unappropriated land, surveyed and unsurveyed.

Total 58,460,000

LAUREL MAY DISPLACE BRIAR

Roots Found in American Mountains to Be Used in Making Pipes in Place of French Wood.

The briar pipe so familiar to the smoker may give way to the laurel pipe, as a result of the security and high price of French briar, from which most pipes have been made. A sale of a large quantity of mountain laurel roots from one of the national forests in the southern Appalachians has been reported by officials in charge.

The mountain laurel root is similar in appearance to the French briar, which is the root of the white heath or "Bruyere." These roots are gathered in large quantities, and after being cleaned and sawed into blanks they are placed in hot water and simmered for twelve hours or more. This process gives them the rich hue for which the best pipes are noted. It is said that in 1915 the value of the blanks shipped to this country was almost \$300,000, and in addition a large number of finished pipes were imported.

A number of pipe manufacturers in this country have been on the lookout for substitutes, and the Forest Products laboratory has conducted experiments to determine the availability of other woods. It is reported that the mountain laurel root burns out more readily than briar, but forest service experts are trying to find a method of hardening the wood, and have succeeded to an appreciable extent. They have also found that a number of the various kinds of chaparral which are abundant in the west give promise of yielding material which will be the equal of French briar in every way.

UNCLE SAM AIDS SPORTSMEN

Prepares Directory Showing From Whom Information Can Be Obtained Concerning Game Laws.

Uncle Sam has made it easy for anyone interested in the subject to obtain information regarding the multitude of game laws that are in force in the United States and Canada.

The seventeenth annual directory of officials and organizations concerned with the protection of birds and game in the United States and Canada, revised to July 15, 1916, has been issued by the bureau of biological survey, United States department of agriculture. It presents in convenient form the addresses of persons from whom information may be obtained concerning the game laws. It shows the date of establishment of each state commission or wardenship, the changes which occur in such offices, and the publications issued by game officials.

It contains also the names and addresses of the president and secretary of each national, state and Canadian club or association organized for the protection of birds and game. The Audubon societies, organized for the study and protection of birds, are also listed, together with the names and addresses of the presidents and secretaries.

TO AID U. S. MANUFACTURERS

To extend the use of American railway equipment and supplies in the far East, Australia and South Africa, Uncle Sam will send a special agent to that part of the world to investigate the field for American products of that character. The investigation will be made by Frank Rhea of the division of valuations of the interstate commerce commission.

Mr. Rhea will make a careful study on the ground of the conditions as they affect railway construction, equipment, traffic, the probable extension or reconstruction of railways, tramways, etc. While all specific opportunities for securing orders will be promptly reported, the real purpose of the investigation is to gather together the fundamental facts and conditions that will enable the American manufacturer to consider intelligently the different fields and to determine whether it is to his advantage to enter any of them."

"Big Rattlesnake Killed. Tifton, Ga.—The largest rattlesnake seen in this part of the state has been shown in Tifton by Dr. M. F. Welch of Chula. It measured seven feet and six inches, and had 12 rattles and a button. Dr. Welch shot it after it had frightened two small boys out of a cotton patch."

"Political Race for Legless Men. Zanesville, O.—Three men, possessing a total of four legs, were nominated as the Republican candidates for county commissioners."