SIXTEEN MILITARY CITIES TO BE BUILT IN RECORD-BREAKING TIME

Homes to Accommodate 600,000 Soldiers of the National Army Must Be Ready by September 1—Each Cantonment Is to Have 1,000 Houses, With a Population of 40,000 Men—Food Needed for Army.

Washington.—Sixteen great military cities, which when completed will house about 40,000 men each—and there are not more than 150 cities in the entire United States of greater population—are now in process of construction. These cities are the cantonments in which the first American selective draft army, of between 500,000 and 600,000 men, will receive their preliminary training in this country, prior to their transfer overseas to the allied battle fronts in France. The contractors to whom the contracts have been let for the building "overnight," so to speak, of these 16 army cities, are already hard at work, and they must finish their jobs by September 1.

That the war department will succeed in making good and that each of these new cities will be ready on schedule time for the more than 30,000 draft men who will be ordered to them for training, is the belief of every officer in the army. Army officers and regular army enlisted men, with several thousand civilian employees added, will bring the population of each cantonment to about 40,000 men, necessitating a building problem involving the construction of about 1,000 houses, all of them of considerable size, in the space of a few weeks. The average ground area covered by each cantonment will be between 1,500 and 2,000 acres, and the maintenance of the 16 cities is expected to entail an expenditure which in one year will probably total more than $120,000,000.

To feed the soldiers alone, who will be trained in these cantonments, will require in one year more than 2,000,000 bushels of wheat, more than 84,000,000 pounds of fresh beef, and 42,000,000 pounds of fresh pork. The milk needed will total in a year more than 10,500,000 gallons, and there will be needed probably 2,500,000 bushels of Irish potatoes, over 325,000 bushels of onions, and over 275,000,000 pounds of other vegetables, such as cabbage, spinach, turnips, etc. In addition to all this food for man are the oats, hay and other feed which will be needed by the more than 100,000 horses and mules which will be employed at the cantonments.

Location of the Cities.

The 16 army cities will be located near Ayer, Mass.; Yaphank, L. I.; Wrightstown, N. J.; Annapolis Junction, Md.; Petersburg, Va.; Columbia, S. C.; Atlanta, Ga.; Chillicothe, O.; Louisville, Ky.; Battle Creek, Mich.; Des Moines, Ia.; Fort Riley, Kan.; Fort Sam Houston, Tex.; Rockford, Ill.; Little Rock, Ark., and American Lake, Wash.

What the emergency means which faced the war department following the passage of the selective draft law and the announcement by President Wilson that he would call to the colors the first 500,000 men of conscription age on September 1, can be understood, as was pointed out by an officer of the quartermaster corps, by keeping in mind what happens in the ordinary run of affairs during the construction of the average living house. The architect takes his time over the plans, there is plenty of time to look about for a contractor, and much time is wasted waiting for materials.

"Compare," says a war department memorandum, "this everyday experience with the government's task of providing in about twelve weeks barracks for about 600,000 men, with water supplies, plumbing and heating equipments, hospitals, storehouses, stables, and shops in locations where there was nothing at the time the site was selected but meadow and grove. What private citizen would expect to move into a house on September 1 on which not a stroke of work had been done on June 1?"

Each cantonment will be a city of orderly and properly laid out streets and blocks, with complete sewerage and electric lighting systems, railroad yards, water lines and fire departments, garbage incinerators, and hundreds of other conveniences necessary in the life of any well-organized modern settlement.

In the construction of the Panama canal the government's expenditure amounted to about $40,000,000 a year, and for the cantonments probably as much will be expended in four months. Just about one month ago the officials on whose shoulders was placed the burden of making the cantonments ready on time, started to solve the problem. Involved in the task was first of all the selection of the 16 sites, the scientific planning and laying out of the 16 cities, the purchase and the assembling of the materials, the drawing up of the contracts and the signing up of the contractors. Also there was the mobilization of the thousands of carpenters, mechanics and other laborers, skilled and unskilled, and hundreds of other matters, some big, others small, and all of which had to be settled in the shortest possible time.

Job Measured in Carloads.

To construct each cantonment were required about 4,000 carloads of materials. As soon as the site was determined upon, a sanitary engineer, a city planner, and an army officer representing the war department proceeded to the place selected and started the work going. They were followed by the contracting engineer, who holds a major's commission, and under whose supervision the city is now being built.

An idea of the size of this job may be gained at a glance at the material estimate for a typical cantonment. Lumber is the big item, some 26,000,000 feet or 1,325 carloads being the requirement. Roofing nails alone will fill one modern freight car. Crushed stone for the roads will make 812 carloads.

Here are some of the other items: 28,000 squares of roofing, 60 cars; 20 carloads of nails and hardware; 20 carloads plumbing; 192 carloads of tanks, heaters, stoves, ranges, piping, electrical materials, refrigerators, and the like; railroad materials for five miles of track, divided into 30 carloads of ties and other timber, 20 carloads of spikes, rails, fishplates, etc., and 114 carloads of ballast; 10 carloads of electric light poles, wires, insulators, etc. Materials for 12,000 cubic yards of concrete will make 70 carloads of cement, 350 carloads of stone and 175 carloads of sand.

The men of the cantonments will sleep in double-deck bunks. This means there will be 37,000 separate bunks, each with its mattress. To transport the mattresses, 125 cars will be required, and the bunks will take 62 more. Water and sewer lines will make 65 carloads each, and 150 carloads of hospital equipment will be necessary. Three carloads of screens are also included in the estimate, as are 20 carloads of construction tools.

Where water cannot be obtained from already utilized sources wells must be driven or reservoirs constructed. The problem of sewage disposal will be met by connecting cantonment sewage mains to already existing sewage systems where possible, or by building reduction stations where necessary.

Provide Rifle Ranges.

Areas of the cantonments will vary with the topography, the minimum being from 1,500 to 2,000 acres. In addition to the city itself, parade grounds, maneuvering spaces and rifle ranges must be provided.

Each cantonment will contain close to 1,000 buildings, the typical company barracks being a two-story structure, built of wooden frame, covered with matched boards. Roofs will be well covered with prepared roofing. They will be well ventilated with flues, lighted by electricity, heated in the North by steam and in the South by stoves. Each will have a kitchen and mess hall.

Col. I. W. Littell of the quartermaster's department of the army, who is in charge of the work of building the cantonments, made public the fee system of the cantonment contracts. The fees vary from 10 per cent on small contracts of $100,000 or less to 6 per cent on contracts of more than $3,500,000, with a final upset limit of $250,000. The fees in all cases cover both profit and overhead expense. They were fixed upon by the department acting with the assistance of the emergency construction committee of the general munitions board and other civilian advisers.

"In deciding on the cantonment contracts we have had to consider three main points of practically equal importance," Colonel Littell said. "The first has been the absolute necessity of speed, the second, proper construction, including sanitation and communication and transportation facilities; the third, economy. Taking all three into consideration and also the fact that time will not permit the completion of drawings and specifications which would be necessary in order to ask for competitive bids before the work must be started, the quartermaster's corps, acting in conjunction with the emergency construction committee, decided to make contracts on the percentage or 'cost plus' basis, at the same time using all possible safeguards in the shape of guarantees from the contractors as to their capacity and integrity.

"The profit system has been decided on only after weeks of study to find a basis for the fees which would assure the country of the highest grade of work from the contractors and at the same time prevent extravagance through the payment of excessive profits. It is a pleasure to pass tribute to the loyalty and patriotism of the great majority of contractors who have come here to discuss the question with us. With a few exceptions, they have acquiesced willingly in our contention that the profits must be kept down to the lowest level consistent with high-grade work. Some firms have offered to do the work on a cost basis, but we have considered this an unwise policy both economically and nationally. The utmost speed and efficiency must be developed in these and future building jobs for the government, and the acceptance of offers of free service might easily disrupt the high-grade contracting firms best qualified to do the work effectively.

"On all amounts between $535,714.29 and $3,000,000, which will probably cover the majority of the important contracts, the fee, including the contractor's overhead profit, will be 7 per cent."

There is probably no more interesting feature of the great cantonment problem than the subsistence of the soldiers. H. M. Cottrell, agriculturist of the farm development bureau of Memphis, was asked by the Little Rock Board of Commerce to estimate the amount of food supplies which will be needed at one cantonment. Mr. Cottrell is one of the recognized agricultural experts of the South, and his conclusions are made with authority. Mr. Cottrell took as his unit, in compiling his figures, the army division of 28,500 officers and men.

"Army rations," says Mr. Cottrell, "vary somewhat with the opportunity to secure the different foods. In a permanent cantonment like that to be established at Little Rock (which is similar to all the others in the country) the allowance per man will approximate four and a half bushels of wheat and one and a half bushels of corn per year. The daily rations per man will average one-half pound of beef, one-fourth pound of pork, one-fourth pound of mutton or goat meat, one-half pint of fresh milk if it can be obtained at a reasonable price, one and one-fourth ounces of butter, and two and one-half pounds of vegetables, including twelve ounces of Irish potatoes and one ounce of onions.

"One division of men will need at at least 7,000 mules and horses. Each horse and mule will be allowed daily fourteen pounds of grain and ten pounds of hay. Three-fourths of the grain ration will be oats and one-fourth corn if the price and supply make this practicable."

To feed a division of American selective draft troops Mr. Cottrell estimates the following as the amount of food needed:

128,250 bushels of wheat.
42,750 bushels of corn.
146,698 bushels of Irish potatoes.
20,520 bushels of onions.
17,554,260 pounds of fresh vegetables, other than Irish potatoes and onions.
5,201,250 pounds of fresh beef.
2,850,625 pounds of pork.
2,900,625 pounds of mutton or goat meat.
650,000 gallons of fresh milk.
822,250 pounds of butter.
57,800 dozens of eggs.
91,250 pounds of chicken.

For the animals required by one division there will be needed annually 838,400 bushels of oats, 159,690 bushels of corn and 12,775 tons of hay.

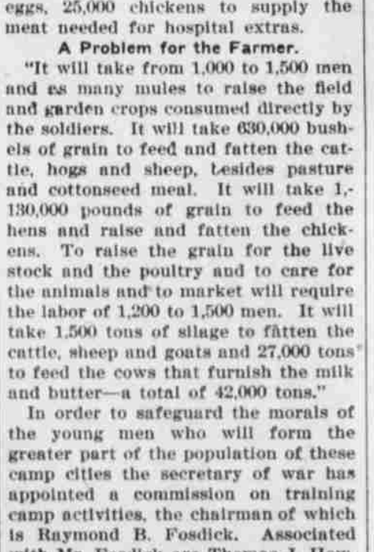
"With average yields," Mr. Cottrell continues, "it will take the crop from 11,000 acres of wheat, 10,000 acres of corn, 37,000 acres of oats, 10,000 acres of hay, 2,000 acres of Irish potatoes, 140 acres of onions, and probably 1,000 acres of green truck, such as spinach, turnips, mustard, cabbage, and like crops. It will also require 10,000 fat cattle weighing over 1,000 pounds each, 17,000 fat hogs, and 50,000 fat young sheep and goats. It will take 8,000 cows to supply the butter and 1,700 cows to produce the fresh milk; 7,000 hens will be needed to lay the eggs, 25,000 chickens to supply the meat needed for hospital extras.

A Problem for the Farmer.

"It will take from 1,000 to 1,500 men and as many mules to raise the field and garden crops consumed directly by the soldiers. It will take 630,000 bushels of grain to feed and fatten the cattle, hogs and sheep, besides pasture and cottonseed meal. It will take 1,130,000 pounds of grain to feed the hens and raise and fatten the chickens. To raise the grain for the live stock and the poultry and to care for the animals and to market will require the labor of 1,200 to 1,500 men. It will take 1,500 tons of silage to fatten the cattle, sheep and goats and 27,000 tons to feed the cows that furnish the milk and butter—a total of 42,000 tons."

In order to safeguard the morals of the young men who will form the greater part of the population of these camp cities the secretary of war has appointed a commission on training camp activities, the chairman of which is Raymond B. Fosdick. Associated with Mr. Fosdick are Thomas J. Howells, Lee F. Hanmer, Joseph Lee, Malcolmn L. McBride, John R. Mott, now in Russia with the Root mission; Charles P. Neill, Joseph E. Raycroft and Maj. Palmer E. Pierce of the regular army. The duties of this committee, which will have representatives at all the cantonments in the country, will be the proper organization of the social and recreational facilities of each community in or near which is located one of the government cantonments.

SHE'S "BEST GIRL SCOUT"



Miss Eleanore Putzki of Washington, seventeen years old, winner of 25 merit badges for superiority in various activities of the Girl Scouts, was presented with a gold eaglet by Mrs. Woodrow Wilson recently. This was the first time a Girl Scout has ever been awarded the highest honor in the organization. Miss Putzki is a member of the graduating class of the Washington high school, is a good cook, an expert swimmer and a leader in the various activities of her organization.

WHAT CAN WE DO?

After an auxiliary of the Red Cross has secured a permanent place of meeting and has equipped it as a workroom, the next thing to do is to determine just what kind of work the auxiliary will undertake to do. If it is decided to make surgical dressings and hospital supplies, it must be remembered that these include many different things which must be made according to very definite specifications and up to certain set standards. Most hospital and surgical supplies are the product of needlework and the sewing machine. They include pajamas, bathrobes, sheets, pillow cases, different sorts of bandages, compresses, gauze rolls, wipes or sponges, and gauze drains.

The auxiliary should organize a class in the preparation of surgical dressings and employ a qualified instructor to teach the correct methods for making all surgical dressing. Members of the class, having taken the course, will be in position to instruct others and supervise the work of volunteers.

A portion of the money received for membership fees may be used for paying for the services of an instructor. In many communities women in sufficiently good circumstances have taken the course at their own expense, and afterward donated their services, instructing classes in the work of making surgical dressings. Upon completion of the course a certificate is issued to those who pass the examination qualifying them to become instructors, and a card certifying to this is issued by the bureau of nursing service. The bureau furnishes also a circular of information concerning the conduct of classes and their examination. Further and full information concerning the course in the preparation of surgical dressings and the formation of classes will be furnished upon application by addressing

Bureau of Nursing Service,
American Red Cross,
Washington, D. C.

SIMPLE DRESSES FOR SCHOOL WEAR.

A good many weeks before they will be needed, simple dresses for school wear next fall, make their appearance. Those for the younger girls, just presented, are very plain and present about the minimum in the word of making. But they are smartly cut, and have a few new and noteworthy points in their make-up.

One of these early models for fall is pictured here, and it is suited to any of the familiar wool materials, or to heavy cottons. It is cut in one piece, with two single box plaits at the back and at the front. A short sash of the material of the dress is fastened at each side under one of the front plaits, brought to the back and looped over. The sleeves are long, and large at the top, and the skirt is cut with an outward flare. It is somewhat longer than knee length, and without trimming of any kind. The dress buttons at the front and has a short "V" shaped opening at the throat. It is shown with a white pique collar, as plain as the dress, but collars of thinner materials, like organdie or dimity, finished with very narrow crocheted edging, might be substituted for pique. In the interest of preparedness a variety of easily handled collars for the schoolgirl are to be furnished with a few substantial dresses; for fresh and pretty collars contribute daintiness and something of variety to the schoolgirl's dress.

Now that everyone is asked to help to conserve wool, it is not out of place to suggest that wool dresses that have been discarded by grown-up members of the family should be handed down to the younger girls and remodeled into schooldresses and frocks for everyday wear. Even though there is no need to economize, so far as the family is concerned, it is patriotic to make use of discarded woolen dresses in some way. If they are not needed at home, no one will have to go far to find a place where they can be used to the best advantage. Some women hoard clothes and other belongings which they cannot use, rather than to give them away. This is always stupid, but just now it is considerably worse than stupid.

Julia Bottomley

Reducing Waistline.

While these are the days of the Venus de Milo waists, still there are some women with waists that need reducing. A good exercise for the purpose is as follows: Placing the hands on the hips, bend the trunk forward and stretch the arms down until the fingertips touch the floor. Exhale as you bend down and inhale as you straighten up. Repeat this exercise four or five times daily.

Wide Belts of Ribbon.

Wide ribbons can hardly be too wide, indeed wide enough to form the belt, which reaches from the waist to bust and goes under the arms. Vivid greens and pinks and reds often assert themselves somewhere in a young girl's toilette. Such ribbons also border skirts.

A Pinked Sport Hat.

Worn with a suit of beige jersey was a smart little sports cloche made entirely of row after row of pinked white broadcloth with navy silk showing through the pinked edge. A tiny blue silk bow finished the crown front.

A Touch of Color.

Wash blouses showing trimming contrast often give the home dressmaker ideas for color combinations that lift a blouse out of the ordinary. An expensive blouse seen recently was a sky-blue handkerchief linen. All the seams were hemstitched. Its decoration was a frill about 4 inches wide of white down the front, a sailor collar and turned-back flaring cuffs of white organdie. The collar had two rows of narrow lace, one on the edge, one a half-inch inside. The front frill was run into horizontal short tucks from the point of the collar to the belt, and the edges left free forming the ruffles edged with a borderin[illegible] of valenciennes lace the same width as the collar. The cuffs had two rows of creamy val spaced like the collar.

A Student of Publicity.

"There is a time and a place for everything."

"Yes," answered Senator Sorghum sadly; "and it's rather unfortunate that one of the most reliable ways to attain publicity is to say something at the wrong time in the wrong place."

SEEK SAFE HAVEN ON FARMS

Some Rich Men Are Said to Be Paying Landowners to "Employ" Their Sons to Escape Draft.

Government agents have been at work in Queens investigating the cases of several farmers in the Newtown, Flushing and Great Neck sections who are reported to have accepted money to keep sons of wealthy men on their payrolls so as to escape the draft, says the New York Herald. The agents have obtained the names of young men who registered as farmers, but who, it is said, have not been tilling the soil.

Government officials have been told that farmers have been well paid by wealthy parents to "employ" the youths. According to reports that have been openly discussed in these sections at least a dozen farmers have men on their payrolls who do not know a grubhook from a cultivator. These men, according to the story, are supposed to report daily to the farmers and to receive wages of $6 a week. Instead of working on the farm the young men are devoting their time to playing golf or driving about the island in their motor cars.

On the Editor.

A magazine editor of New York prides himself on his knowledge of poetry and on his delicate critical sense of the same. His friends often joke him about this.

A noted illustrator laid on the editor's desk the other day a couplet that ran:

"Help us save free conscience from
the paw
Of hireling wolves whose gospel is
their maw."

The editor read the couplet, then laughed heartily.

"Did you write this?" he said. "By George, it sounds like you. Better stick to the pencil, boy. Look at that rhmye—paw and maw. Why, it sounds like the S. O. S. call of kids in distress. Paw and maw! Geewillikins!"

"I didn't write it," said the illustrator.

"Oh, you didn't, eh? Who did, then?"

"A duffer named Milton," said the illustrator. "John Milton. Ever hear of him? He was the author of a little thing called 'Paradise Lost,' I believe, but these lines are cut out of a sonnet written to Cromwell in 1652. I—"

But the editor had fainted dead away.

Pershing's Paymaster.

In one of those out-of-the-way army posts where the outside world seems all too remote, word that General Pershing was to lead an expedition to France set the post buzzing with gossip and speculation, says the New York Evening Post.

"Now that's something like," said one officer. "I'd give anything to go with Pershing."

"Why not write and tell him so?" suggested a young lieutenant.

"What! Me?" came the reply "Why, I'm only a paymaster."

"And a mighty good paymaster," insisted the other.

And so a letter was duly forwarded to General Pershing by the paymaster who wanted to serve under him in France. Two days later a telegram arrived at the post for the paymaster. It read:

"You're it.—Pershing."

It's not all red tape in the army.

One plows, another sows, who will reap no one knows.