From Promised Land Back to Egypt

ACCORDING to the oldest historical document relating to the subject, the Song of Deborah, the lady who sat under a palm tree (Judges 5), there were forty thousand men capable of bearing arms when Moses attempted to "personally conduct" the Israelitic nation across the Sinai peninsula from Egypt to the promised land. The journey took several years and not many of those who started lived to reach their destination.

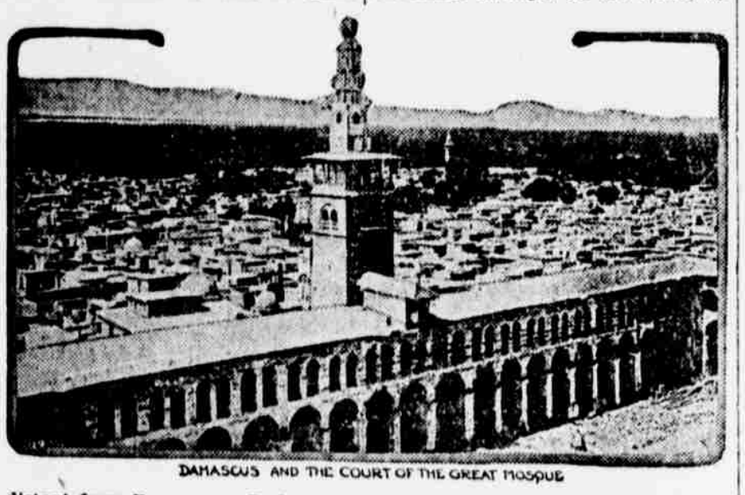
According to the announcements from Constantinople, Kaiser Wilhelm wants to send 500,000, or twelve and one-half times as many fighting men from the promised land to Egypt, but he plans to do it in a few months.

The Sinai peninsula, lying between El Ma'an, where the German emperor purposes to mass his troops, and the Suez canal, is a place practically without water.

The Teutonic-Turkish plan, it is announced, is to form the basis of this supreme attack upon Suez at Aleppo. A part of the distance from Constantinople doubtless may be covered in a comparatively short time. Aleppo is situated in the midst of the great recruiting fields of Asia Minor. Where there are no railroads, thousands of laborers have been crushing stone and paving the way for the horde that is expected to pass that way. Over much of this distance great engineering works have been going on for many years, and while we have no certain knowledge, it is likely that the way to Damascus has been made comparatively easy.

Pilgrims' Railroad.

From Damascus to Medina, one of the holy cities of Arabia, runs the Hejaz or pilgrims' railroad. It is a privately owned and privately operated road for the convenience of pilgrims on their way to the tomb of the prophet and to Mecca, many days beyond, a distance that must be covered by camel. Many writers, apparently English sympathizers, feel certain that the rolling stock of this little line will not be sufficient to provide transportation for the hundreds of thousands of men who are to be massed at El Ma'an, a station less than 300 miles



DAMASCUS AND THE COURT OF THE GREAT MOSQUE

distant from Damascus. Perhaps the Germans will be able to overcome this difficulty and get the 500,000 men to Ma'an by the commencement of operations in the spring, as threatened.

When they leave Ma'an, however, and start westward—that's a different story. The Arabian desert and the Sinai peninsula are so little known to Europe and America, excepting in regard to their history and geographical position, that the announcement in regard to marching a great number of men across to the Suez canal—and supplying them with food and drink by means of motor trucks, sounds reasonable.

The Arabian desert is a barren land of mountains, hills and deep valleys. Perhaps motor trucks could climb the elevation, or pursue their way through the bowlder-scattered valleys, but motors of the dimensions now known cannot pass along rocky trails, not more than eighteen inches wide, and there are many such on the way from Ma'an to Suez. Perhaps wide detours would obviate trying to pass, but with such a sun as beats on the Arabian desert (frequently 110 degrees) and a scarcity of food and water, every mile is a tremendously important matter in the transportation of a half-million men.

Precarious Undertaking.

The Israelites complained to Moses that they remembered the cucumbers and the melons of Egypt, as they attempted to struggle along through this wilderness. That was close to 4,000 years ago. Men have become accustomed to even greater luxuries than the cucumbers and melons of Egypt in A. D. 1916. It looks like an impossible, and if not impossible, a precarious undertaking. Even the Teutonic allies themselves would not be pleased with having 25 men of the original 500,000 arrive in Egypt. But in all these 4,000 years the nature of the country has not changed to any appreciable extent, excepting no doubt to become more barren than it was. Oases have been abandoned, where there were palms, and trails have been covered by the drifting sands. But mountains and valleys are doubtless about as they were when Moses started out from Egypt on his divine mission. According to the news reports, the kaiser intrusts to Leopold of Bavaria this similar mission, and he gives him a much more serious task to perform than that undertaken by Moses. His men will be stocked with provisions, no doubt, as the Israelites could not have been, but there are twelve and one-half times as many of them, and instead of years, he will be expected to accomplish his work in weeks, and bring his men to Suez in fighting condition for the beginning of their real offensive campaign in that region.

And to combat their fighting strength they will be met by hordes of Abyssinians, Indian troops, Great Britain and her European allies, who have made voyages in ships to the battlefield. Thus the contemplated attack on Suez seems to be one of the most tremendous moves of the present world war, and one never equaled in this territory where men were fighting soon after they began to inhabit the earth.

INVENTION OF STEAMBOAT

Robert Fulton Given Credit Because He First Made Such Travel a Possibility.

Science follows the custom of crediting as the "inventor" of anything the man who was first really successful in his invention and first made the invention a practical thing. Robert Fulton was the first man to make steam navigation an everyday possibility and commercial success, and he is therefore looked upon as the father of steam navigation. Regarding Symington, Fulton, and the invention of the steamboat, the Encyclopedia Britannica states: "The first practical steamboat was the tug Charlotte Dundas, built by William Symington and tried in the Forth and Clyde canal in 1802. The trial was successful, but steam towing was abandoned for fear of injuring the banks of the canal. Ten years later Henry Bell built the Comet with side paddle wheels, which ran as a passenger steamer on the Clyde, but an earlier invention to follow up Symington's success was the America, Robert Fulton, who, after unsuccessful attempts on the Seine, fitted a steamer on the Hudson in 1807 with engines made of his design by Boulton & Watt, and brought steam navigation for the first time to commercial success." If we trace the "invention" of the steamboat back, however, to the man who first drove a boat with a steam engine of his own invention, we come to Denis Papin, who in 1707 drove a model boat with a steam engine which he had invented, and who had in 1690 proposed to use the piston rod, of which he was the inventor, to drive the paddle wheels of boats.

Artificial Ears.

Artificial ears are so skillfully made that they may with difficulty be distinguished from natural ones, so it is claimed.

When the person who has lost an ear applies to the manufacturer for a substitute, there is made a mold of the remaining ear. If there be left any part of the other, a mold of that part also must be taken to assist in the fitting of the artificial. Manufacturers assert that no two ears are alike, and that it takes a skillful workman to prepare an ear from the mold or molds.

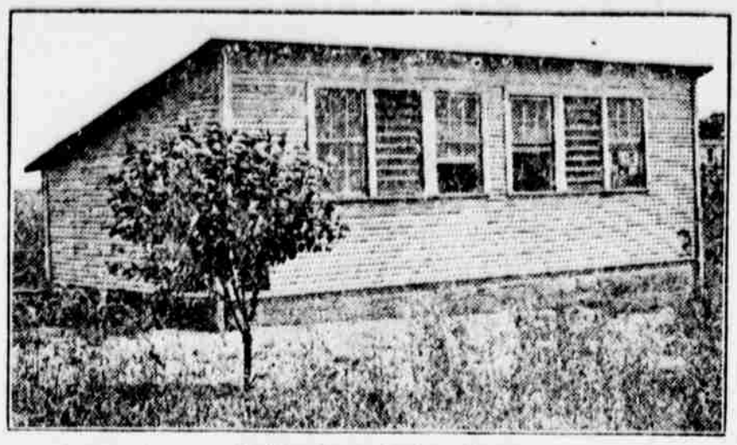
When finished the new ear is pasted on the stump, or simply set in the position of the lost ear. It is really only the first artificial ear that is expensive, the chief cost pertaining to the making of the mold. Vulcanized rubber, which can be bent and twisted, has been found to constitute the best material for the making of artificial ears.

Footrail for the Home.

"Unless you spend less time and wages in saloons I am going to take advantage of a new law and have you posted in the saloons, and then any saloonkeeper who gives you a drink will get in trouble," Recorder Cain of Bayonne, N. J., warned James Flannagan. Mrs. Flannagan said her husband neglected her for saloons.

"Your husband might be induced to stay home if you rigged up a brass footrail," suggested the recorder. "Then he could bring his beer home and enjoy himself." Upon promise to reform, Flannagan was dismissed.

FOLLOW NATURE AS CLOSELY AS POSSIBLE



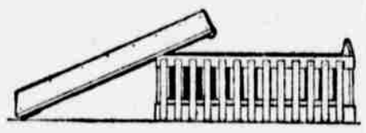
Shutter Front Poultry House.

It is not the easiest thing in the world to so feed young chickens as to bring them to an early and perfect maturity and then to continue feeding them to produce eggs and meat in the greatest quantities. Too many people let the chickens feed themselves. Others seem to think that a few handfuls of corn thrown out night and morning is sufficient. Unless confined in pens where they cannot get at their natural food chickens will manage to survive on indifferent feeding for a long time, but if they are to be brought to a full state of perfection and if they are to be made to produce all the eggs possible and tip the beam at market time at the highest notch, a careful study of feeding is necessary.

The natural food of fowls is meat, seeds and grain. The meat they find in bugs and worms and the dry feed in the seeds of grass and grain of the range. If allowed free range and given access to this in sufficient quantities fowls will balance their own rations and perhaps get as good results as if fed by hand. If they are confined the lack of meat must be supplied; but it must be understood that animal matter in the shape of meat meal, meat scraps or cut bone is dangerous unless it is fed in conjunction with other food.

It is extremely dangerous to give fowls too much of any concentrated food as it only renders them ravenous and unsatisfied, and in the end results in disease and death. Food must be nutritious and to balance the bulk, dry matter and animal matter must be of proper proportion to form just the right combination to produce health and the best conditions for laying and producing meat.

As to the quantity to be fed there can be no fixed rule. The safe way is to feed liberally—all that the flock



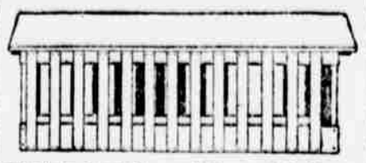
Chicken Feed Trough With Cover Removed.

will eat up clean. It is never safe to cut down the rations of growing birds until some feed is left over every day.

Of course too much feed of the fattening quality is not good for laying hens because they do not lay best when overfed, but this does not mean that they should be starved. A well-balanced ration consisting in the main of corn, wheat and animal matter will keep a hen in fine laying condition. We do not believe that a very lean hen is the best layer.

To persons who are obliged to buy all the feed for their flocks the question is one of great importance and many people who have raised poultry for years without keeping account of expenses, and then turned to a sensible system of accounts, have been surprised to learn that it cost them more to keep their flocks than they received from them. However, people are learning how to manage poultry and even with grain at the high prices that have prevailed the last five years have been able to make a comparatively good profit in poultry.

For growing chickens a mixture composed of three pounds of wheat, three pounds of cornmeal, meat containing 50 per cent of digestible protein mixed with two pounds of finely cut clover or alfalfa makes an excel-



Chicken Feed Trough Accessible From Both Sides With Cover On.

lent ration. Other grains at times may take the place of wheat or corn, although nothing will quite equal them.

Of course in addition to grain and meat fowls must have plenty of grit, granulated bone or wood charcoal at all times. Green food in the shape of chopped alfalfa leaves or clover is essential, particularly in the winter when the birds do not have access to the range. This should be kept before the chickens at all times or it may be fed in the grain mixture.

Grit is absolutely necessary because chickens cannot digest the food in their crops without it. For this purpose ground oyster shells, coarse sand or ground rock may be used. When at large chickens supply their own grit and it is not necessary to keep it before them except when they are confined.

The difficulty of keeping the feed clean and dry during continued exposure is nearly overcome by using troughs with slatted sides and broad, detachable roofs. Build the troughs from six to ten feet long, with the sides five inches high. The lath slats are two inches apart, and the troughs are sixteen inches high from floor to roof. The roofs project about two inches at the sides and effectually keep out the rain except when high winds prevail. The roof is very easily removed by lifting one end and sliding it lengthwise. The trough can then be filled and the roof drawn back without lifting it. This arrangement saves the feed, keeping it in good condition and avoiding waste. The trough should be placed in a sheltered place out of reach of the wind.

DANGEROUS FOOD FOR CHICKS

Practice of Feeding Salt to Cause Early Molt Should Be Avoided Unless Well Understood.

Doubtless thousands of persons who keep a few fowls and depend upon the scraps from the kitchen constituting the greater portion of the food required to sustain them, are unaware of the danger there is in feeding salt food to poultry.

A very little salt is known to be healthful for fowls, but if they receive more than a very small portion, such as might be found in oversalted victuals, or in scraps into which some accidentally spilled salt had been thrown, it will cause the hens to die, or if not sufficient to cause death, they will be apt to molt and lose their feathers out of season.

Some poultrykeepers who understand just the quantity a hen can stand without damage, will feed a little salt early in autumn to cause the hens to molt early, so as to insure eggs during the early winter months when eggs are scarce. This practice is dangerous unless thoroughly understood.

Little chicks should have no salt at all until more than half grown. Instances are known where chicks were kept in a barrel laid on its side, with the hen inside, and the chicks all died within a few hours. Investigation revealed the fact that the barrel used for a coop had been a salt barrel well cleaned, and yet there was enough salt left to kill the entire brood.

Reason for Few Eggs.

One reason why eggs are not laid in the winter months, even where there are pullets, is that the summer supply of worms, bugs and insects is cut off, and no meat substitute is given to take their place. The hen is an omnivorous feeder, requiring both meat and vegetables.

BALANCED RATION FOR EGGS

Wheat, Oats and Corn Make Good Scratching Feed in Litter—Don't Overlook Green Feed.

Overfat hens cannot lay fertile eggs if they lay eggs at all. Corn is used as the principal feed by many farmers. They do not stop to think that corn is twelve parts fat-producing and one part bone and muscle-producing. Wheat is a more balanced ration, being a little over nine parts fat-producing and one part bone and muscle-producers. With this information we can see that one-third wheat, one-third oats and one-third corn in the coldest winter weather makes a grand scratching feed (to throw among deep litter).

As weather warms up reduce the corn and with bran as the basis of a mash fed each day you will have your rations well balanced, with the exception of the meat and green foods, which must be looked after by each individual. Ten per cent of your mashes should consist of animal food of some nature. You cannot feed too much green succulent feed.

If no beef scraps are on hand, oil-meal mixed with your mash each day will help to take the place of meats.

FEEDING THE SITTING HEN

Besides Grain, Water, Grit, Etc., Fowl Must Be Kept Entirely Free From All Vermin.

Grain and water should be placed close to the nests of sitting hens, with grit, charcoal and green feed, so that they can be induced to feed regularly. And exercise the greatest care in keeping down lice.

Use insecticides liberally and regularly. Lousy hens will mean lousy and dead chicks.

BARN COMPLETE IN EVERY WAY

Maximum Amount of Convenience Arranged For in Plan Shown Here.

WELL WORTH CAREFUL STUDY

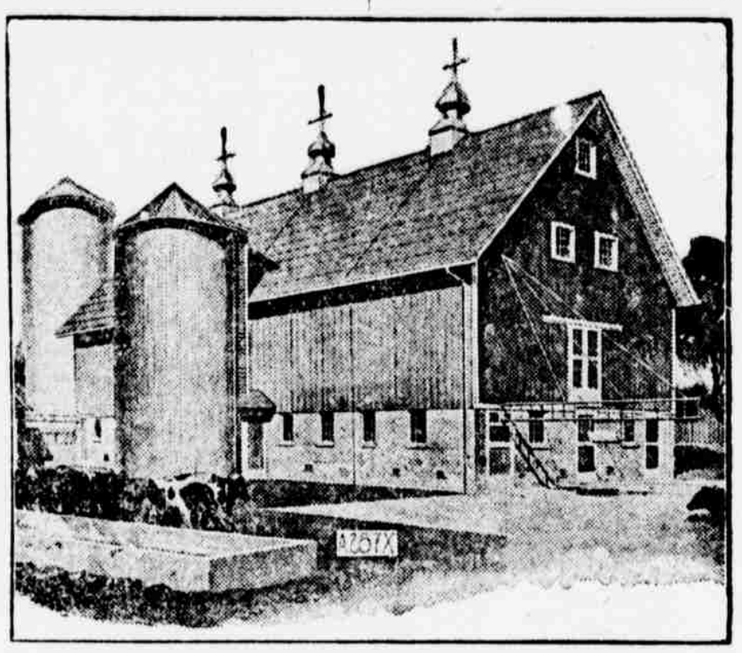
Intending Builders Will Quickly See Points That Make Building So Desirable—Two Silos Provided, as Cheaper Than One Large One.

By WILLIAM A. RADFORD.

Mr. William A. Radford will answer questions and give advice FREE OF COST on all subjects pertaining to the subject of building work on the farm, for the readers of this paper. On account of his wide experience as Editor, Author and Manufacturer, he is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 1827 Prairie avenue, Chicago, Ill., and only inclose two-cent stamp for reply.

Three different kinds of material are used in the construction of the large and well-equipped dairy barn that is shown here. The foundations are of concrete, the walls up to the floor of the haymow are of structural tile, and the upper part of the barn is framed.

Concrete is used almost universally for foundations now, no matter how the rest of the building is built. Structural tile makes a most satisfactory wall for several reasons. Walls made of this material are very quickly built and the air space in the tile forms an effective insulation against temperature changes. Because of the nonabsorbent surface of vitrified tile the walls can be readily washed down and kept clean. Tile is not subject to decay and will therefore last indefinitely, the same as concrete.



The upper part of nearly all barns is built of frame because it is so much cheaper than any other way of doing this work.

The clear space between the floor and the ceiling is eight feet six inches. It is much better to have too much head room than too little, especially in a large, well-built barn, which can be kept warm very easily. There is another reason for building with plenty of room. In this particular case the litter carrier runs out onto a crane that is high enough above the ground so that the manure can be emptied directly into the manure spreader without all the muss that is generally caused if the material is placed in a pile and emptied into the manure spreader later. If the ground is on a slope this process can be carried out very readily, but in some cases a slight depression is dug so that the manure spreader can be run into this and lowered enough so that the carrier will run on the crane well over it. The crane is shown in the perspective and also in the floor plan.

The floor plan shows most completely the extensive and well-designed ventilating system. The intakes are placed in the structural tile wall and run over the cows and let the fresh air in above their heads. The air is then carried back across the animals and goes out through the foul-air shafts back of the cattle, from where it is carried in flues up along the wall and along under the roof to the ventilators on the peak. The dotted lines in the floor plan show the arrangement, with its various parts.

The facing-in arrangement is used in this plan, but it could be easily changed to the facing-out style if desired. Such a change would also involve a change in the ventilating system, and would make the inlets nearer the wall and the out-takes in the central part of the stable. The tracks would not have to be changed in any way however, as the switches make it possible to run the carrier on any of the tracks from any of the other tracks. The floor plan clearly shows the construction and arrangement of the track, with all the necessary switches.

All the interior finishings and walls of the barn should be as smooth as possible, so that the barn can be washed down with cold water each day. All the stanchions are generally made of enameled iron or japanned iron, so that the water will not have any effect on them.

Two silos are included in the plan for this barn. In many instances the owner may decide that it would be better to build one large silo, but very often it is cheaper to build two smaller ones. The higher the silo goes the more it costs per foot to build it, and very often it is much cheaper, if carefully figured out, to build two silos that do not go very far above the ground. The feeding is generally very easy in either case.

One of the details of a barn that is very important is the type of hanger that is to be used on the sliding doors. In a large barn such as this one there are quite a few sliding doors, and the best quality of material should be used, or they will be a nuisance. The kind that is chosen should have a cover over the track so as to protect it from the action of the weather and also keep the birds out of it. It should be strong enough so that there will be no tendency to sag or break. Little things like this are often considered unimportant, but if a farmer had a door break down during very cold weather and had to nail it in position to keep his stock warm until he could fix it, he would be much more likely to consider such little things of importance afterward.

The floor plan shows all the equipment that is necessary to do all the work in the stable. For instance, hydrants are placed in the stable to handle the cleaning. This is a good plan, because the stable will be warm enough so that there will be very little danger of the hydrants freezing, as they might if they were on the outside.

The study of this plan will be worth while to any man that is interested in the best modern practice in the arrangement of dairy stables for the maximum amount of convenience.

Undesirable Erzerum.

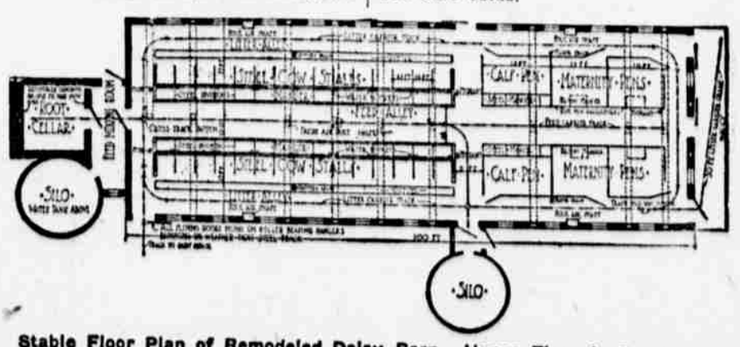
Erzerum, the ancient Armenian city which the Russians have taken from the Turks, is, from the European point of view, one of the most undesirable places of residence upon earth. It stands more than 6,000 feet above the sea, and in winter the temperature falls to 20 degrees below zero, while in the passes by which it is approached rages the Tipi, a terrible blizzard. But Erzerum is at its worst in summer, owing to the appalling lack of sanitation. Mr. Hepworth, an American clergyman, who was there after the Armenian massacres of 1896, found even an open gutter only in one or two thoroughfares. The people simply pile their refuse of all kinds on the pavement before their houses, which has long become invisible; and mortality is so heavy that of 12 children, a common family, it is lucky if six survive.—London Chronicle.

On Trial.

"The trial judge says we must have evening sessions to expedite matters."

"Good gracious," exclaimed the beautiful actress. "And I haven't a single evening gown."

The oil contained in onions is an enemy of the germs that cause colds, therefore, there is a good reason for the argument that eating raw onions will cure colds.



Stable Floor Plan of Remodeled Dairy Barn. Upper Floor Is Reached by Concrete Bridge Over Root Cellar at Far End of Barn.