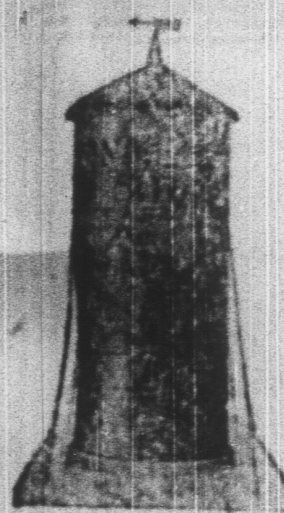


THE INDIANA SILO



Thousands of farmers in all parts of the United States have put the Indiana Silo to the test of service during the past fourteen years. Fifty thousand are now in use. The first Indiana Silos ever erected are still standing, still in excellent condition and still apparently good for indefinite years to come.

A large per cent of our 1916 sales were made to farmers who were already using Indiana Silos. Many of these repeat orders came from the owners of the finest farms in America—from the largest and most successful breeders and feeders everywhere.

These men could have bought any silo at any price—they buy the best of everything—that's why they continue to buy Indiana Silos.

If you are going to buy a silo—this satisfactory service rendered everywhere—should be of special interest to you.

The cost of all materials is advancing like the price of wheat and corn. Why not save money by contracting for your silo now. It undoubtedly will cost you more next spring or summer.

Let us send you our proposition—to contract now for your silo and deliver it later.

WE WANT A GOOD DEALER

We offer you the agency for one of the fastest selling low priced cars on the market today—built by one of the best established automobile companies entirely in their factories—not assembled.

Our line consists of a Touring Car, a Four-Passenger Roadster, a Two-Passenger Roadster and several models of light delivery trucks—a complete line—every one a good seller and a money-maker for the dealer.

We will guarantee deliveries in quantities for the 1917 season.

Our representative will gladly arrange an interview either in your city or in Pittsburg. Our dealers' proposition is very attractive and co-operative.

Live wires will write immediately.

Auto Representative,
Pittsburg Press,
Pittsburg, Pa.

PAINT

Paint for every use, made of best pigments, colors and oils, and guaranteed for 5 years, sold direct to consumers where no agents or dealers are handling it, at a Remarkable Low Price. Many unsolicited testimonials from paint users. Mansfield weather proof paints—30 shades of house paint, 8 shades of roof, 5 shades of interior flat wall paint. Write and tell us your wants and we will send you estimates.

Mansfield Paint Co.

Mansfield Penna.

A Delightful Sand Table

Indoors a sand table not only gives a great deal of pleasure to children but it also affords them occupation that is instructive and delightful, says the Ladies Home Journal. A mother who had one placed in a small room says it is the favorite retreat for the little ones during the winter days, where they play for hours at a time with the windows wide open, happy and contented as can be. On it they build forts and towns and lay out farms—erecting the necessary houses—with rivers and creeks flowing through field and forest, and construct bridges and build boats.

The idea of the sand table came to the mother one day, while she was watching the intense delight of her little daughter in telling the younger children about the sand table at school and how it was used. The mother went to see the wonderful object and concluded to have some on a large scale.

She secured a kitchen table the top of which measured 50 by 46 inches, and had the legs sawed off several inches, leaving the table 25 inches in height. Then a narrow wooden strip four inches wide was firmly fastened around the edge of the top, forming a tray which was lined with fine, light-toned sand, and a sheet was fastened beneath, half way between the top and the floor, the sand in dark green.

The tray was filled with sand about two or three inches deep. It is usually kept dry, but is sometimes dampened, so the children can form rivers by simply digging down to the tin lining in a slight curve. Tin foil and blue tissue paper represent other bodies of water with an occasional use of water to make it more realistic. Fences and trees of trees and shrubs make orchards, groves and forests.

Next to Man

The teacher was questioning her class about graduation in the scale of existence and asked, "What comes next to man?"

Little Tommy raised his hand anxiously.

"Well, Tommy," interrogated the teacher, "what is it that comes next to man?"

Tommy smarting under a sense of a previous defeat, responded: "His undershirt, ma'am."

Scientific Farming

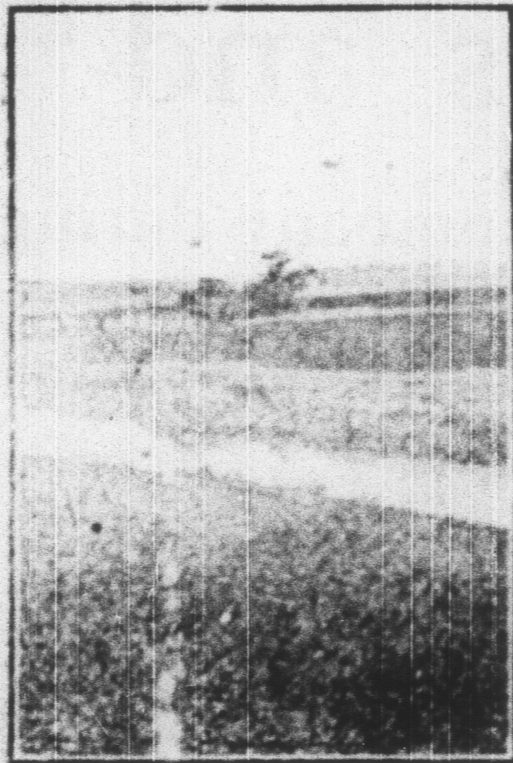
SOIL CONDITIONS FOR ALFALFA

Difficult to Succeed With This Crop in Moist Climates.

(Prepared by United States Department of Agriculture.)

While alfalfa has shown a remarkable ability to adapt itself to various climates and conditions, it is injured by high temperatures combined with much moisture in the atmosphere. It is not easy to succeed with this crop in moist climates, such as the eastern United States, except where soil conditions are favorable. Marked success has been obtained in certain sections of the south where the average rainfall exceeds 60 inches.

To all farmers who wish to raise alfalfa east of the ninety-fifth meridian, which runs from about the middle of Minnesota to the line between Texas and Louisiana, H. L. Westover, one of the forage crop investigators of the bureau of plant industry, United States department of agriculture, and W. R.



ALFALFA KILLED BY STANDING WATER.

Hendrick, assistant in agricultural education, states relations service, have prepared the following suggestions dealing with the requirements of the crop in this section:

A deep, fertile, well drained, nonacid soil is required. Loam soils with open subsoils are best for alfalfa, but it may be grown on soils of almost any texture, from sandy or gravelly loams to heavy clays. The proportion of failures, however, is apt to be considerable on deep, porous sands or sands underlain by gravel. It is highly essential in any case that the soil be well supplied with decaying vegetable matter and plant food. It is practically useless to sow alfalfa on thin soils where the bedrock approaches the surface, on land which is underlain by comparatively shallow depths of hardpan or in locations where the subsoil is so compact that the roots cannot penetrate it. It is of prime importance also that an alfalfa field shall be located where the slope is sufficient to carry off the surplus water and that the water table shall remain at a sufficient depth from the surface. In porous soils that conduct water readily standing water at four or five feet in some places is injurious.

The formation of ice on the surface of fields is fatal to alfalfa. This condition is most apt to occur on fields that are level or that contain pockets. Rich river or creek bottom lands are often well suited to the crop, provided they are well drained. Prolonged overflows are nearly always harmful, but are least injurious if they occur during winter or early spring, when growth is practically dormant. Clay bliskies of considerable scope are frequently water soaked and poorly drained because of the close texture of the soil. Seepage areas from outcropping rocks or other causes often occur on hillsides also, making underdrainage of such areas necessary. In examining a tract of land for alfalfa frequent borings should be made with a soil auger to determine the character of the soil and subsoil as well as the drainage conditions. This instrument will usually be of greater value in determining the suitability of a particular tract to alfalfa than a chemical analysis of the soil. A common one and one-quarter inch auger with a sharp beveled end and a suitable crossbar for a handle is practical for this use.

Lightest soils in general are particularly well suited to alfalfa, but even such lands are frequently acid and require liming. When alfalfa is once started under favorable soil conditions, weeds, including perennial grasses, will likely prove its most dangerous enemy. This is one reason why sod land is not recommended for this crop. On account of the danger from weeds, it is usually best to provide the alfalfa for one or two years with a clean cultivated crop, such as truck, small beans, corn, potatoes or corn. Where late summer or fall seeding is practiced, cutting peas, early potatoes, early sweet corn and early varieties of soy beans, when cultivated, furnish an opportunity for removing a crop in time to seed alfalfa the same season. Where crimson clover is used as a cover crop following a cultivated crop, the soil is usually in good condition after harvesting the crimson clover the following spring for hay, or when needed the crimson clover may be turned under for soil enrichment, after which the ground may be prepared for alfalfa.

FLOOD RELIEF PLANS PROVEN

Feasibility of Storage Reservoirs Given a Good Test

ENGINEER ANALYZES SCHEME

Shows From Data Now Available That Had Necessary Work Been Done in Operation Big Flood Would Have Been Prevented.

The recommendations proposed for flood relief in the western part of the state have been authoritatively confirmed before the American Society of Civil Engineers. This body has published a paper submitted by one of its members dealing with a flood which occurred after the comprehensive survey of the Allegheny and Monongahela rivers was completed and showing that the flood treatment proposed is feasible and practicable.

The paper in question dealt mostly with the flood of March 22, 1913, which reached a height of 28.2 feet at Pittsburgh, and passed on down the Ohio to become a part of the greatest and most destructive flood that has ever visited the Mississippi valley up to that time.

This flood was the first of any consequence which occurred in Western Pennsylvania after the above mentioned studies and findings had been completed. It was also the first that took place after gauging stations were in operation on all the tributaries of the Allegheny and Monongahela rivers upon which the construction of storage reservoirs was recommended.

Complete information available.

Complete information was therefore, at hand regarding the part these tributaries played in producing the rise at Pittsburgh, and it was possible to show conclusively that had their flood waters been held back in storage reservoirs, as would have been the case if the reservoir system had been in operation, the flood at Pittsburgh would have reached a height of only 17 feet, or 5 feet below the danger line of 22 feet. In other words, the flood would have been lowered about 11 feet at Pittsburgh and the damage of about \$500,000 that took place within the city limits alone, as well as the very considerable losses that occurred at other points along the rivers above and below the city, would have been prevented.

As a matter of fact such a marked reduction in flood height would naturally be expected, for the total volume of the flood wave above the danger line at Pittsburgh was only about 5,000,000,000 cubic feet, whereas the total storage capacity of the proposed reservoir system is about 10 times that amount. This large capacity is needed to control the great floods that occasionally occur, the maximum of which at Pittsburgh took place in March, 1907, when a stage of 33.5 feet was reached. Even in this record flood, the volume of the flood wave above the danger line at Pittsburgh was only about 26,000,000,000 cubic feet, or less than half the storage capacity of the proposed reservoir system.

Prove the Reservoir Claim.

The findings with regard to the 1912 flood at Pittsburgh are peculiarly valuable in bearing out the claims made as to the effective control the reservoir system recommended would have had over past floods at Pittsburgh, had it been in operation. These claims are based on studies in which certain assumptions had to be made, because as a ready stated, complete information as to the flow of the controlled tributaries was not available. Gauging stations have now been in operation for several years on all these streams, and the accurate data thus provided for the study of the 1912 flood have most conclusively demonstrated the conservative character of the assumptions that had to be made.

The favorable bearing of this important paper on the storage reservoir recommendations is of special interest at this time on account of the active advocating to the need of water conservation in Pennsylvania. The people in various parts of the state are giving serious study to this question with the idea of having the next legislature take some action looking toward the regulation of rivers. The work already done in this connection in Western Pennsylvania will be important in the selection of a definite plan as it is generally believed that what is feasible for the rivers in that section can be applied to streams all over the state having flood or low water troubles.

STATE WASTING VALUABLE ASSET

Failure to Control the Rivers Creates Big Loss

FULLEST USE IS ADVOCATED

Plan, Proposed Whereby Floods Can Be Prevented and Excess Waters Made of Benefit to the Communities of Pennsylvania.

The aim of those interested in river regulation in Pennsylvania is to obtain the fullest possible use of the waters of the state. The primary object is to prevent the damage caused by floods, but in this connection the waste of a valuable supply of water is apparent. The next legislature is to be asked to take some definite step looking toward the complete utilization of the state's water resources to turn them into the asset nature intended them to be and to stop all waste and damage.

It is known that there is an average of some seventy million-million cubic feet of water running off to the sea from the surface of the United States annually. The possibilities of beneficial use of this vast supply are difficult to more than vaguely conceive. Complete utilization of all the value in water is, of course, impossible and therefore these will be seen at the idea of even attempting the attainment of so vast an ideal. Yet some believe that the problem is just this—a complete inventory of water resources, a consideration of the various uses to which every unit can be put, and of the relative value to the community of each and the adoption of a complete and consistent policy of development for every stream from source to mouth.

Co-Operation is Needed.

To obtain stream control and all that goes therewith for the good of all, co-operation of the national, state and local governments is needed. In Pennsylvania the opportunity is at hand for the next legislature to take the initiative in bringing about this co-operation. That stream control is feasible and practicable has been simply proved by the exhaustive studies made into this subject in the western part of the state. A voluntary commission in the city of Pittsburgh engaged in this work for the purpose of "suggesting a plan or plans by which some practical means may be had to protect the city from floods," and it was first believed that the problem should be treated entirely from a local standpoint. It soon became evident, however, that the problem could not be considered only in its local aspect, for the regulation of Pittsburgh's flood losses to those of other communities above and below was too obvious. Nor could the flood problem be long considered by itself at every point, its relation to problems of navigation, water supply, sewerage, and other uses stood out. So that finally the Commission determined that it would not do its duty to the community if it reported simply on means to protect Pittsburgh from floods; but that it must consider the problem from the county, state and national point of view as well; in other words, that the only suitable solution would be that which secured at the lowest possible cost the greatest possible total benefit of all kinds for the greatest number of people throughout the Ohio valley.

Possibly there are some cities and localities where a tendency to treat the problem of flood prevention or protection as a local matter, but as is believed the full study of the subject was done in the case of Pittsburgh will show the way to accomplish much in the most economical and effective way and to bring about real success in the all too long delayed. Unfortunately, there seems to be a strong tendency that has been noticed to act by the recent floods, a tendency to consider attention to local problems and local solutions alone. It is hoped that, before it is too late, this tendency may be overcome and that all those in the Ohio valley who are interested in flood relief and local government and municipalities in the interest of stream control and flood prevention.

Storage Reservoirs Feasible.

It is not claimed that any one method of river improvement is applicable to all situations, but only to be mentioned. But the feasibility and practicability of storage reservoirs for treatment of the situation in the western part of the state appear to all intelligent persons who are examining into it. It is believed that the prevention of floods and the control and use of water, to say nothing about the improvement and effect on navigation, are of sufficient importance to justify the state in attacking the problem vigorously.

CITY MARKETS FOR FARMERS

Methods Employed Largely Influence Prices and Cost.

PUBLIC MARTS IN TOWNS

The Farmer Has a Direct Interest in the Efficiency of the Marketing Organization in Municipalities Since Lack of Efficiency May Be Reflected in Poor Prices For Products.

(Prepared by United States Department of Agriculture.)

The farmer has a direct interest in the efficiency of the marketing organization in cities since lack of efficiency may be reflected in the poor prices he receives for his products. Some of the later the great majority of the profitable produce raised on the farm for



A FARMERS' RETAIL MARKET.

sale finds its way to the cities for distribution, and whether it passes from the ownership of the farmer before or after reaching such centers the sales usually are based on city quoted prices. Many farm products, especially perishables, are consigned to city commission merchants to be sold for what they will bring, the prices received in such cases being directly dependent on their city market values. Prices based on these values are paid also when such products are sold by the producer directly to wholesalers or jobbers after shipment to city trading centers. Even the products which the farmer sells at the nearest market station are bought largely for consumption in cities and so are paid for in most cases at prices which are dependent on those prevailing in city markets. The city, therefore, through the operation of city demand in relation to supply, largely determines the prices which the farmer receives for his perishable products.

The primary local marketing organizations of cities are more important elements in shaping these prices than is generally recognized by the farmer. Many perishables will not stand re-shipment and once in a city must be sold for the prices prevailing there. If after products reach the cities there are high marketing costs due to wasteful or inefficient marketing methods these must be greater margins or discounts between the prices received by producers and those paid by consumers. The economic machinery for marketing farm produce is such that many of the losses expressed in abnormal margins may be shifted on the producer in the form of low buying prices, while others may be charged to the consumer through high selling prices. If, on the other hand, city marketing costs may be reduced through the employment of improved methods economic laws should operate under normal conditions to give higher prices to producers and lower costs to consumers, while the movement of produce should be accelerated sufficiently to make marketing more profitable at the same time to wholesale and retail dealers.

Farmers' retail markets often consist of designated sections of a street on which farmers assemble with their wagons of miscellaneous farm produce and sell in small amounts directly to the consumers who come there to buy. The more permanent farmers' retail markets, however, are located on plots of ground set aside for the purpose and fitted with substantial sheds, under which the farmers drive their wagons.

Farmers' retail markets, whether of the curb or shelter type, are not recommended for all towns without qualification. The size of the community and numerous other local considerations must determine the practicability of the enterprise. There must first be a sufficient number of farmers in easy reach of the town who will bring supplies for the market. There must be in the town a sufficient demand on the part of consumers for such a market, where by going in person and carrying away their goods they may obtain produce fresher than that available at the average retail grocery store and usually at somewhat lower price.